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*The Assessment/File Upload Form and many worksheets in the Appendix will be used multiple times throughout this course. Please make additional copies of these pages.
Getting Started
**WELCOME TO CALVERT!**

We are glad you have selected our curriculum. Please take the time to read the information that follows.

**Note:** This lesson part, "Welcome to Calvert," is identical for all courses. Once it is finished, it will be marked complete for each course.

If you are the Learning Guide, please make sure you are logged in and have the Teaching Notes enabled. You can do this by clicking on the Teaching Notes toggle, as shown here:

![Teaching Notes Toggle]

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**CALVERT'S PLUS CURRICULUM**

You will learn using Calvert's PLUS curriculum framework. Our framework is designed to motivate and engage you by using a research-based, digitally supported instructional approach.

![PLUS Framework]

**WHY DO WE CALL THIS THE PLUS FRAMEWORK?**

Our PLUS framework includes Project-Based Learning, Active Learning, Use for Mastery, and Show elements. Details on each element appear below.

**Project** - Projects are designed to give you fun, engaging, real-world opportunities to creatively show what you have learned. You can also collaborate with other students in the same course.
Learn - Our courses contain a variety of active learning opportunities, including interactive digital activities designed to encourage you to think independently and Quick Checks to assess your understanding.

Use - You will complete a Use for Mastery assessment at the end of each lesson to make sure you have achieved a deeper knowledge (and have "mastered" the concepts).

Show - We offer many creative and exciting opportunities for you to showcase what you have learned. You can submit audio, images, and videos from your computer or mobile device for a teacher to evaluate.

You can view the following video to learn more about the PLUS framework.

Your course is divided into units. Units are made up of lessons, and a lesson is split into lesson parts. Each lesson part is planned to be a day's work.

Please go online to view this video ▶

WHAT YOU WILL FIND IN YOUR COURSE

PROJECT OPENER

Some units in your course are built around a project. When there is a project in your unit, you will see an introduction and description in the beginning of the unit that will tell you:

- What the project will be about
- What you will be doing as part of the project
- How the project will be graded
- Any work that needs to be created or submitted as part of the project

Projects often encourage you to be creative by adding audio, video, or images to make your presentation more interesting and informative. For hints and tips on creating and uploading your projects, click here.

LESSON PARTS

Each unit is made up of lessons. Each lesson helps you learn a new idea in the unit. The lessons are divided into parts. Each part makes up one day's work.

SHOW

“Show” lessons are places in the unit that focus on your project. They give you a chance to show what you have
UNIT QUIZ

At the end of every unit, a unit quiz checks your understanding of all the concepts from the unit. Some questions will be scored by the computer, and some will be marked by your teacher.

In lower grades, the Learning Guide will need to help Grade K and Grade 1 students by reading assessments aloud in cases where Text-to-Speech is not available and taking dictation to submit students’ answers online or helping them to upload responses completed using paper and pencil.

You can view the following video to learn more about what you will find in a course.

Please go online to view this video ▶

WHAT YOU WILL FIND IN A LESSON

At the beginning of each lesson, you will see a lesson title and part number at the top of the screen. You will also see resource buttons to the right of the screen. These resource buttons will identify what you will be working on for your project (if applicable) and will also include lesson objectives, books and materials, assignments, as well as the ability to use Text-to-Speech and print the lesson.
RESOURCE BUTTONS
Here's what each resource button will include:

- **Project** – The Project button provides a short description of the project you are doing as part of the lesson.

- **Objectives** – Objectives are statements that describe what you will be learning. The objective will be your goal for the lesson across all lesson parts.

- **Assignments** – The Assignments list highlights the lesson's work at a glance. This list includes reading assignments, labs, activities, and exercises.

- **Books & Materials** – All books and materials needed for the day's lesson are listed here. You may find it helpful to review this list before each day's lesson part.

- **Standards** show how each lesson is aligned with national or state standards.

- **Text-to-Speech** will read the page text aloud or allow you to look up the definition of a word that appears in the lesson.

- **Print** allows you to print the lesson, unit, or course you are currently viewing.

You can view the following video to learn more about what your course and lessons will look like.

Please go online to view this video ▶

COLORS AND CARD TYPES

COLORS
Each lesson card is color-coded.

- **Green** refers to Learn sections.

- **Purple** refers to Use sections.

- **Orange** refers to Project/Show sections.
CARD TYPES

All content in a lesson part is laid out as a series of cards. Each card indicates a distinct activity that you will do as part of your daily work. Here are the different types of cards:

**Collaboration** is a way you can share information, data, or projects with other Calvert students in your school. Calvert uses an online collaborative tool to allow you to chat with other students in the classes in specifically designed lessons.

**Final Project** cards will be a place to showcase what you have learned at the end of your project. You can be creative and submit audio, images, or video from your computer or from your mobile device.

**Interactive Activities** are fun digital tools that will help you learn more about a topic. Interactive Activities are digital activities that may include virtual labs, simulations, videos, and more.

**More to Explore** is additional content that can help you either learn more about a concept or help you understand a new concept. More to Explores can include videos, additional readings, or digital activities that help you apply knowledge of a concept a different way.

Some projects are designed to be completed one piece at a time. **Project Progress** cards provide the opportunity to share pieces of project work for feedback in advance of pulling all the pieces together for the final Show.

**Quick Checks** are short assessments that will help you clarify what topics you have mastered and what concepts you may need to review. After you complete a Quick Check, you will be given the correct answer and a resource to help you review the concept in a new way.

We want to check in with you to see how you're feeling about your lessons. **Rate Your Enthusiasm** will appear periodically after your lessons, so you can give us real-time feedback during your course.

We want to check in with you to see how excited you are to begin a project. **Rate Your Excitement** will appear periodically after your lessons so you can give us real-time feedback while you complete each course.
We want to check in with you to see how you are progressing through your project. **Rate Your Progress** will appear on some of the days you are working on a project so you can let us know where you are in the project and how things are going.

We want to check in with you to see how ready you feel for the course. **Rate Your Readiness** will appear in lessons in the Getting Started unit.

We want to check in with you to see how you are understanding each lesson part. **Rate Your Understanding** will appear periodically after your lessons so you can give us real-time feedback while you complete each course.

At the end of every unit, we provide a **Unit Quiz** where you will be assessed on your understanding of all the key concepts learned in that unit. The concepts that are tested are based on the key standards identified by your state.

Each lesson has a **Use for Mastery** assessment. These open-ended response questions help assess how well you understood the lesson concepts. The 'Use For Mastery Guidelines & Rubric' below each question will provide helpful information on how and what to submit for your response. You may be asked to type into a text box or upload a document.

---

**ONLINE PLATFORM ACCESS**

You can complete our course using a fully online approach with access to a computer or with a hybrid approach, with the help of printed materials. When online, you can use our content in one of two ways:

1. Our online platform called Calvert Teaching Navigator (CTN). You can access CTN online at [http://login.calvertlearning.com](http://login.calvertlearning.com). Your school's Learning Management System (LMS).

2. If you are viewing the Calvert product through your school's LMS, please contact your school for how to get access.

Please review our [Technology Requirements](#) to make sure your computer is set up to allow full access to our courses.
SUGGESTED DAILY SCHEDULE

The following is a suggested daily schedule as it displays in CTN. Although each subject can be studied in a designated order, know that you can adapt the schedule and pace to meet your individual educational needs.

A complete course is planned for an average school year of about nine months. There are 160–180 daily lesson parts in a course. The number of lesson parts and tests for individual subjects will vary based on the amount of material that must be covered in the course during the school year.

Each day, we recommend that you spend approximately 120-150 minutes in grades K-2 and 100-120 minutes in grades 3-8 on English Language Arts, 45 minutes on Math, 45 minutes on Science, 45 minutes on Social Studies, and 30 minutes reading independently.

You can view the following video to learn more about the Suggested Daily Schedule.

Please go online to view this video

KNOW YOUR ROLE

ROLE OF THE LEARNING GUIDE

The Learning Guide is a responsible adult (usually a parent) who guides the student through his or her academic journey.
Your certified school teacher directs the instruction, determines the pacing, and makes decisions for intervention and enrichment. However, the Learning Guide has an essential role in helping you on the road to academic success.

The Learning Guide has access to the all the course materials. Additionally, teacher-specific instructions (Teaching Notes) written specifically to the Learning Guide or instructor give information, directions, and suggestions for leading you through a lesson.

When Teaching Notes are enabled, teacher-specific instructions for a card will appear just below that card.

You can view the following video to learn more about the role of Teaching Notes and the Learning Guide.

Please go online to view this video ▶

ROLE OF THE STUDET

While the lessons in this curriculum are written to you, the student, that does not mean you are expected to work completely on your own. Keep in mind that your Learning Guide is here to support and help you. You and your Learning Guide will work as partners. Together you will decide which assignments you will work on independently and which you will do jointly. During the course, there will be times when you will be directed to read a selection aloud for your Learning Guide, share information you have learned, or take part in a discussion.

When working on your own, ask for your Learning Guide's assistance if you have any questions or if directions do not seem clear. You should also check with your Learning Guide before linking to any of the websites listed in the lessons or activities.

ROLE OF THE CALVERT SUPPORT STAFF

At Calvert, we understand the importance of having support when you need it. We offer many resources to help you along the way. If you have a question about our curriculum, our Education Counselors are available to help you Monday through Friday, 9:00 a.m. to 5:00 p.m. Eastern time, by phone at 1-888-487-4652, or email at support@calvertservices.org.

RATE YOUR READINESS

Please go online to view and submit this assessment.
PRINT VS. DIGITAL EXPERIENCE

If you plan to do this course exclusively online, you will have access to all the course material digitally.

If you are going to complete some of this course offline, you might have already received a printed version of the lesson manual. If not, you can print at any time using our Print-On-Demand functionality. Using this functionality, you can print a single lesson, an entire unit, or the entire course.

Print-On-Demand does not print the textbooks that you will need as part of your course. Please contact your school directly to have the textbooks shipped to you.

As part of your project work or assessment, you may be required to submit a file, image, or video to your teacher. To do this, you will need access to a computer and a camera-equipped mobile phone.

WORKSHEETS

If you are working in the print version of our lessons, all the worksheets that are needed to complete the course are provided in the Appendix as part of the printed packet. Otherwise, PDFs of all worksheets will be linked to the individual lessons. You will need Adobe Reader® to use these worksheets. Most of these worksheets are fillable, and you can use your computer keyboard to type directly in them and save them on your computer.

NOTEBOOKS AND JOURNALS

You may be directed to use a notebook throughout this course. The Math Notebook should be used to reflect on your learning and can serve as a single place to record information as you move through the course. You can take notes in your physical notebook or even digitally by using an application such as Evernote®.

ONLINE ACTIVITIES

Your course may include interactive digital activities, videos from publishers such as YouTube®, virtual simulations, and digital assessments that cannot be completed without going online.
BOOKS AND MATERIALS

MATH IN FOCUS TEXTBOOK
You will find textbook page numbers in the lesson that are underlined. We refer to this as hyperlinking. Clicking directly on the link opens the corresponding page of the textbook. You can then scroll through the pages of your textbook.

The e-text will not allow you to directly type into any blanks.

MATH IN FOCUS WORKBOOK
Like the textbook, the Math in Focus workbook is also hyperlinked. Clicking on a workbook hyperlink opens the corresponding workbook chapter as a PDF document.

You will then need to navigate to the page number mentioned in the hyperlink.
INSTRUCTIONAL VIDEOS

The Math in Focus course is based on the Singapore Math method, which may be new to some Learning Guides. For this reason, Calvert Learning has produced a series of instructional videos to provide training in the basics of this method. These videos will be linked directly in the appropriate lessons, but for your convenience they are listed and linked here as well:

How to Teach Number Bonds
How to Teach Number Bonds in Mental Math, Part 1
How to Teach Number Bonds in Mental Math, Part 2
How to Teach Problem Solving
How to Teach Bar Models, Part 1
How to Teach Bar Models, Part 2
How to Teach Bar Models, Part 3

BRAINPOP®

Calvert Learning is pleased to offer BrainPOP®, an engaging web-based interactive program that supports the core curriculum. BrainPOP® activities include animated video tutorials, interactive activities, and assessments that provide a rich, multisensory experience designed to improve learning. These research-based activities were developed in accordance with national and state academic standards. These engaging activities are accessed through the online course. When a BrainPOP® activity is appropriate for a lesson, the link is located with the online lesson for that day. Click on the link, and you will be directed to the instructional activities.

DISCOVERY EDUCATION™ VIDEOS

Your course may include videos from Discovery Education™, which provides thousands of subject and grade specific videos to enrich your learning experience. Discovery Education™ videos have been aligned to lessons throughout the Calvert curriculum to reinforce lesson objectives. These videos can be accessed through the online lessons in Grades K–8. If a video has been aligned to a lesson, you will find a link to that video in the online lesson.

ADDITIONAL MATERIALS

We have included many resources designed to provide additional help and support as you complete your course. These supplementary resources are provided to you in the appropriate lessons as downloadable PDFs that you can print as needed.

Your course may also use these materials that are commonly found throughout your home.

Please go online to view this video ➤

RATE YOUR READINESS

Please go online to view and submit this assessment.
Unit 1 - Numbers, Numbers Everywhere
Numbers to 10 - Part 1

Objectives
- Count sets of objects 10 or less

Books & Materials
- Math in Focus 1A
- 10 small items such as buttons, pieces of pasta, beads, pencils, crayons, or coins

Assignments
- Complete Warm-up
- Read and complete pages in Math in Focus 1A.
- Complete Practice Questions.

LEARN

WARM-UP
1. How old are you now? How old will you be on your next birthday?

2. How many fingers do you have? Count one hand and then the other.

TEACHING NOTES

WARM-UP ANSWERS
1. Check your student’s work for accuracy.

2. 10 fingers

In this lesson, your student will learn how to count objects from 0 to 10. After the Warm-up, show him different sets that contain 10 or fewer objects. Ask your student to count aloud, counting with him, if necessary. Tip: When your student is counting, arrange 5 objects in a row. It will teach him to recognize 5 as a group, which will help with counting more quickly.

INSTRUCTION

Here are 10 teddy bears. Point to each object and count them aloud.

[Image of 10 teddy bears]
TEACHING NOTES

When you read the poem on p.1 in Math in Focus, Book 1A, with your student, have him count on his fingers as you read each number. Watch how he counts the different toys in the Recall Prior Knowledge section p.2. Ask: How many objects are in each set? Make sure he can tell you each amount and understands that the number is the same in each matched pair. Then have your student complete the Quick Check p.3.

Watch how your student counts. Encourage the practice of putting 5 items in a row and putting the remaining items in another row.

If your student needs more practice, put small objects such as coins or buttons into piles and have him count them. You can also say a number and have your student create a pile.

You may find it helpful to view the following video:

Instructional Support Video: Learning to Count

LOOKING FORWARD:

Several of the lessons in the next few chapters will involve counting. You may want to put 10 counters or connecting cubes and a ten frame in a sandwich bag and keep it with your student’s math materials.

PRACTICE

Read and complete pp. 1-3 in Math in Focus, Book 1A.

ENRICHMENT

Gather a handful of pennies. Group the pennies in sets of 5 by putting one penny on top of four pennies, as shown.

Count by 5s to find the total number of pennies.

WRAP-UP

You use numbers to count objects.

How many people are in your family? Add your grandparents and other family members to count a greater number.
How many people are in your family? Add your grandparents and other family members to count a greater number.

Please go online to view and submit this assessment.
Numbers to 10 - Part 2

**Objectives**
- Read 0–10 in numbers and in words
- Use models to demonstrate mathematical concepts and/or solve problems.

**Books & Materials**
- Math in Focus 1A
- Workbook 1A
- Math in Focus - Teacher Edition
- connecting cubes
- ten frame
- index cards (Optional)
- Number Worksheet
- Word Form Worksheet

**Assignments**
- Complete Warm-up
- Read and complete pages in Math in Focus 1A.
- Complete Number Worksheet and Word Form Worksheet.
- Complete pages in Workbook 1A.
- Complete Quick Check.

**LEARN**

**WARM-UP**

Match the numbers to the words.

- a. 6 one
- b. 1 three
- c. 9 nine
- d. 3 six

**TEACHING NOTES**

**WARM-UP ANSWERS**

- a. six
- b. one
- c. nine
- d. three

**INSTRUCTION**

Look at this picture. Point to each number and read aloud.

```
0 1 2 3 4 5 6 7 8 9 10
```
You can also use **words** to show numbers. You can write the numbers 0–10 like this:

<table>
<thead>
<tr>
<th>zero</th>
<th>one</th>
<th>two</th>
<th>three</th>
<th>four</th>
<th>five</th>
<th>six</th>
<th>seven</th>
<th>eight</th>
<th>nine</th>
<th>ten</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
</tr>
</tbody>
</table>

**TEACHING NOTES**

When counting with your student be sure to have him begin with zero. Use connecting cubes and a ten frame to model each diagram on (pp. 4-5). As you and your student work though each number, be sure he is recognizing the value, digit, and word form of each number.

You can also have your student use index cards to make flash cards. This will help with studying the word form of the numbers 0–10. He can write the number on one side of the card and the word on the opposite side. Keep the cards with your math materials for further study.

**WORKBOOK ANSWER KEY**

Click on the link below to access the Instructional Support Resource associated with today's lesson.

Instructional Support Video: [Learning to Count](#)

**PRACTICE**

Read and complete pp. 4–6 in *Math in Focus 1A*. Then complete Number Worksheet and Word Form Worksheet. Finally, complete pp. 1–2 in the *Workbook 1A*.

**WRAP-UP**

Today you learned the words that are used to show numbers. Complete the Number Worksheet and Word Form Worksheet.

- Three is a word; 3 is a number.
- Ten is a word; 10 is a number.

Practice reading the numbers and words in the table.

<table>
<thead>
<tr>
<th>zero</th>
<th>one</th>
<th>two</th>
<th>three</th>
<th>four</th>
<th>five</th>
<th>six</th>
<th>seven</th>
<th>eight</th>
<th>nine</th>
<th>ten</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
</tr>
</tbody>
</table>
When counting with your student be sure to have him begin with zero. Use connecting cubes and a ten frame to model each diagram on (pp. 4-5). As you and your student work through each number, be sure he is recognizing the value, digit, and word form of each number. You can also have your student use index cards to make flash cards. This will help with studying the word form of the numbers 0–10. He can write the number on one side of the card and the word on the opposite side. Keep the cards with your math materials for further study.

WORKBOOK ANSWER KEY

Click on the link below to access the Instructional Support Resource associated with today's lesson.

Instructional Support Video: Learning to Count

Read and complete pp. 4–6 in Math in Focus 1A. Then complete Number Worksheet and Word Form Worksheet. Finally, complete pp. 1–2 in the Workbook 1A.

Today you learned the words that are used to show numbers. Complete the Number Worksheet and Word Form Worksheet.

Three is a word; 3 is a number.
Ten is a word; 10 is a number.

Practice reading the numbers and words in the table.

Please go online to view and submit this assessment.

TEACHING NOTES

PRACTICE

WRAP-UP

QUICK CHECK

MORE TO EXPLORE

Watch this video to review the number words.

Please go online to view this video ▶
Numbers to 10 - Part 3

Objectives
- Read 0–10 in numbers and in words
- Use models to demonstrate mathematical concepts and/or solve problems.

Assignments
- Complete Warm-up
- Complete Interactive Activity
- Enter an Assignment Here
- Enter an Assignment Here

LEARN

INTERACTIVE ACTIVITY
You can use an interactive Ten Frame to practice numbers to 10.

Interactive Activity

TEACHING NOTES
Click on the frame icon at the top of the menu on the left and select a ten frame. Instruct your student to drag a certain number of counters into the frame and then say the number. Then have your student click on the Drawing Tools icon at the bottom right and write the numeral and the word for the number on the screen. If your student finds this difficult, he or she can spell the word and have you write it on the screen. (Just for fun, your student may want to click on the counter icon at the bottom of the menu on the left to change the color and shape of the counters.)
You can use an interactive Ten Frame to practice numbers to 10. Click on the frame icon at the top of the menu on the left and select a ten frame. Instruct your student to drag a certain number of counters into the frame and then say the number. Then have your student click on the Drawing Tools icon at the bottom right and write the numeral and the word for the number on the screen. If your student finds this difficult, he or she can spell the word and have you write it on the screen. (Just for fun, your student may want to click on the counter icon at the bottom of the menu on the left to change the color and shape of the counters.)

Objectives
Read 0–10 in numbers and in words
Use models to demonstrate mathematical concepts and/or solve problems.

Assignments
Complete Warm-up
Complete Interactive Activity
Enter an Assignment Here
Enter an Assignment Here
Enter an Assignment Here

INTERACTIVE ACTIVITY

RATE YOUR UNDERSTANDING
Please go online to view and submit this assessment.
Numbers to 10 - Part 4

Objectives
- Write 0–10 in numbers and in words.
- Use models to demonstrate mathematical concepts and/or solve problems.

Books & Materials
- Math in Focus 1A
- Workbook 1A
- Math in Focus - Teacher Edition
- number word flash cards (Optional)

Assignments
- Complete Warm-up.
- Read and complete pages in Math in Focus 1A.
- Complete pages in Workbook 1A.
- Complete Use For Mastery.

WARM-UP

1. Say the numbers:

   3, 5, 6, 7, 8, 9, 2, 1, 10

2. Read the words:

   zero, one, six, ten

TEACHING NOTES

Warm-up Answers

Check your student's work for accuracy.

If your student needs additional review, write down a few numbers on a piece of paper or point to numbers 0–9 on a telephone or 0–10 in a cookbook. Ask your student to read the numbers to you. Use the number word flash cards from the previous lesson to review reading number words.

INSTRUCTION

Using a Ten Frame

How many dots do you see in this ten frame?

You can write the answer as 3 or three.
Use coins or other small objects in a ten frame to show 6.

Now, find other ways to show six.

Or

While reading pp. 7–9 in Math in Focus 1A, have your student use the flash cards made in the previous lesson to show his answers, instead of writing them on a separate sheet of paper. This will help him associate the values with the digits and words and allow you to monitor his understanding of the concepts.

Complete pp. 7–9 and 12 in Math in Focus 1A. Then complete pp. 3–6 in Workbook 1A.

TEACHING NOTES

PRACTICE

WORKBOOK ANSWER KEY
WRAP-UP

In this lesson, you learned how to write numbers.

You can read, count, and write the numbers 0 to 10.

<table>
<thead>
<tr>
<th>zero</th>
<th>one</th>
<th>two</th>
<th>three</th>
<th>four</th>
<th>five</th>
<th>six</th>
<th>seven</th>
<th>eight</th>
<th>nine</th>
<th>ten</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
</tr>
</tbody>
</table>

ENRICHMENT

Complete pp. 10–11 in Math in Focus 1 A.

USE

USE FOR MASTERY

A. 

There are

B. Write the word form of the number.


C. Explain how to find the number of if there was one more.

USE FOR MASTERY GUIDELINES & RUBRIC

Did you:

- Write the answer to number of apples you counted?
- Write and correctly spell the word form of the number?
- Explain how you would find the number of apples if there was one more?
LEARN

**WARM-UP**
Choose one of your favorite picture books. Read the book out loud. Count the objects you see on each page as you read.

**TEACHING NOTES**

*Warm-up Answer:*

Answers will vary based on the book chosen.

Practice counting with your student using picture books. Ask questions that encourage your student to count the objects on the pages. For example, if you are reading a book about animals, you might say: How many animals do you see?

**INSTRUCTION**

Look on p. 168. You can count the candles on the 2 cakes. What are some other things you can count in the picture?

- How many people are at the party?
- How many presents?
- How many balloons?

You can also compare objects. Are there more boys or girls at the party?
Read through each of the concepts on p. 169 in Recall Prior Knowledge.

When counting, review the numerical and word forms for each number with your student. Also, make sure that he uses the terms greater than and less than when comparing numbers, and more and less when comparing objects.

If your student has difficulty visualizing the numbers, use the connecting cubes or a number line to complete the activities.

Complete pp. 169–170 in Math in Focus 1A.

You can use blocks or connecting cubes to show numbers.

These blocks show the number 4.

You can use the words greater than and less than to compare numbers.

The number 5 is greater than 4.

The number 3 is less than 4.

Please go online to view and submit this assessment.
Numbers to 20 - Part 2

**Objectives**
- Count numbers 11–20.
- Read and write 11–20 in numbers and words.

**Books & Materials**
- Math in Focus 1A
- Workbook 1A
- Math in Focus - Teacher Edition
- 2 number cubes
- Math Journal
- counters

**Assignments**
- Complete Warm-up.
- Read and complete pages in Math in Focus 1A.
- Complete pages in Workbook 1A.
- Complete Practice Questions.

---

**LEARN**

**WARM-UP**

Complete the following activity:

1. Roll two number cubes.

2. Compare the two numbers.

3. If the first number cube shows a number less than the second number cube, say *less than*.

4. If the first number cube shows a number greater than the second number cube, say *greater than*.

5. Write the number sentence. Example:

   Four is less than 6.

Repeat the whole activity five or more times.

---

**TEACHING NOTES**

Warm-up Answer:
Answers will vary based on the numbers rolled.

---

**INSTRUCTION**

In this lesson, you will count numbers up to 20.

You can count numbers to 10. When counting numbers from 10 to 20 you can count them one at a time, or you can *count on* from 10.
Look at the cars on p. 171 in *Math in Focus 1A*. You can count the cars one at a time, or group 10 of the cars and count on the ones not in the group.

**Your Turn**

Practice writing the words for 1–20 in your Math Journal.

---

**TEACHING NOTES**

Use counters with your student when working through pp. 171-174 in *Math in Focus 1A*. Have him group 10 and then count on the rest for each number. Then have him count out the numbers again, this time using two different color connecting cubes.

Have your student use one color for the train of 10 cubes and a different color for the remaining cubes needed for each activity. Practice counting and adding one more several times to help your student understand the concept of counting on past ten.

Help your student practice writing the number words in his Math Journal. Put the numbers 1–20 on one side of the page. Write the names of the number next to each one. Have your student trace the number words to learn to write them.

**Instructional Support Video:** *Learning About Small Numbers and Teen Numbers*

---

**PRACTICE**

Read and complete pp. 171-173 in *Math in Focus 1A*. Then complete pp. 167–169 #1-7 in *Workbook 1A*.

---

**WRAP-UP**

You can count up to 20 from 10 by counting on.

There are 10 rainbows in the first row. There are 8 rainbows in the second row. How many rainbows are there in all?
Count on from 10:
10, 11, 12, 13, 14, 15, 16, 17, 18

There are 18 rainbows in all.

You can also count on using words:

ten, eleven, twelve, thirteen, fourteen, fifteen, sixteen, seventeen, eighteen

There are eighteen rainbows in all.

✔️ PRACTICE QUESTIONS

Please go online to view and submit this assessment.
Ask your Learning Guide to help you find Numbers to Twenty on the Math Rack. Play the game to practice counting to 20.

Follow these steps to access the activity:

1. Go to the First Grade Number Sense and Equivalence section of the activity list.
2. Click on Numbers to Twenty on the Math Rack.
3. Click on View Teacher Tool or View Teacher Tool in Spanish.
4. Read and agree to the Terms of Use. Click Continue.

Please go online to view and submit this assessment.
LEARN

WARM-UP

1. Your Learning Guide will tell you a number. Write the number.
2. Write the number word for it.
3. Draw a picture to show the number.

Warm-up Answer:
Check your student's work for accuracy.
Tell your student a number between 2 and 15. Have him write it as a number and as a word, then draw a simple picture to represent the given number. Tell two more numbers in random order.

INSTRUCTION

A ten frame can help you count on from 10.

You can count on from 10 to find the total number of counters. A full ten frame has 10 objects. You do not need to count them all.

Count the total number of counters by starting with the number 10.

10, 11, 12, 13, 14, 15
There are 15 counters because 10 and 5 make 15.

Write 15 as a word:

   fifteen

TEACHING NOTES

Your student may need extra help writing the numbers as words. Write them for your student to trace, if necessary. To build flexible thinking, encourage your student to build the numbers on the ten frames in a variety of different ways.

PRACTICE

Read and complete pp. 174 and 176 in *Math in Focus*. Then complete pp. 169-172 #8-28 in the *Workbook*.

WRAP-UP

Today you learned how to use a ten frame to count on from 10.

Look at the following ten frames.

The first ten frame is full. You do not have to count all the counters because you know there are 10.

You can count on from 10 to find the total number of counters.

   10, 11, 12, 13, 14, 15, 16

You also practiced writing numbers as words.

   There are sixteen counters.
There are sixteen counters.

Please go online to view and submit this assessment.

When you have a large number of objects, remember to count each item twice just to make sure. Point to the object and then say the number. Count the first 10 objects first. Then add the remaining objects to 10 to solve the problem.
## Numbers to 20 - Part 5

### Objectives
- Use place value to represent numbers.
- Use models to demonstrate mathematical concepts and/or solve problems.

### Books & Materials
- Math in Focus 1A
- Workbook 1A
- Math in Focus - Teacher Edition
- 20 connecting cubes
- place-value chart
- place-value mat
- tape (to assemble place-value mat)

### Assignments
- Complete Warm-up.
- Read and complete pages in Math in Focus 1A.
- Complete pages in Workbook 1A.
- Complete Use For Mastery.

### LEARN

#### WARM-UP

Your Learning Guide will tell you a number between 10 and 20. Build the number with your connecting cubes.

Remember that you can easily count greater numbers when you start with 10.

After you build the number, count on from 10 to find the total number of cubes. Write the number on your paper. Then write the number in words.

### TEACHING NOTES

**Warm-Up Answer:**
Check your student’s work for accuracy.

Choose a number between 11 and 20 for your student to build with connecting cubes. Have him write the number and word on his paper. Repeat this activity with other numbers.

In several upcoming lessons, you will see directives for your student to use a place-value chart or a place-value mat. The place-value chart is designed for your student to write numerals or draw small tally marks to represent numbers and determine place value. The place-value mat is comprised of several pages that must first be taped together. This “expanded” version of a place-value chart can then be used to arrange manipulatives such as connecting cubes or counters that your student can use to explore place value.
**INSTRUCTION**

Today, you will learn about place value.

**Making Tens**

Count out 13 connecting cubes. Instead of counting each cube, make a train with 10 cubes. You just made a ten.

Place the other 3 cubes next to the ten. This is one way to show 13.

The number 13 has 1 ten (a group of 10 cubes put together into a number train) and 3 ones (3 cubes that are not put together into a group).

![Image of connecting cubes showing 1 ten and 3 ones]

**Place-value Charts**

You can show the same number using a place-value chart or mat.

**Example 1:** Look at the column titled Tens. This is where groups of ten go.

Place the train with 10 cubes under the tens column on your place-value mat.

Look at the column titled Ones. This is where the extra cubes go that do not make a ten. They are called ones.

Place the other 3 cubes in the ones column.

You have 1 ten (a group of 10 blocks) and 3 ones. This shows 13. Look at this place-value chart.

<table>
<thead>
<tr>
<th>Tens</th>
<th>Ones</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3</td>
</tr>
</tbody>
</table>

You can write 1 to show the 1 train in the tens column. You can write 3 to show the 3 cubes in the ones column.

1 ten + 3 ones = 13

You just showed 13 using place value.
Continue to practice place value with your student using numbers up to 20.

Be sure he is connecting the 10 cubes to make 1 ten. This will help your student visualize place value, allowing him to see that 10 ones equal 1 ten.

Read and complete pp. 177–180 in *Math in Focus 1A*. Then complete pp. 173–176 in the *Workbook 1A*.

Two-digit numbers are made with tens and ones. This is called place value.

The number 12 has 1 ten and 2 ones.

You can write numbers in place-value charts.

The number 12 has 1 ten and 2 ones.

\[1 \text{ ten} + 2 \text{ ones} = 12\]
USE FOR MASTERY

A. Count. Write the number.

There are __________

B. Write the word form of the number.

__________________

C. Write the number as tens and ones.

The number has __________ tens and __________ ones.

D. Explain how to find the number of bananas if there was one more.

| B | I | U | ☐ ☐ ☐ ☐ |

0 / 10000 Word Limit
USE FOR MASTERY GUIDELINES & RUBRIC

Did you:

- Correctly count and write the number of bananas shown?
- Write and correctly spell the word form of the number?
- Write the digits “1” and “8” in the correct places?
- Explain how to find the number of bananas if there was one more?
Compare and Order Numbers to 20 - Part 1

Objectives
- Use one-to-one correspondence to compare two sets of objects.
- Use the words more, fewer, and same when comparing sets of objects.
- Use models to demonstrate mathematical concepts and/or solve problems.

Books & Materials
- Math in Focus 1A
- Workbook 1A
- Math in Focus - Teacher Edition
- four small plates or cups
- small coins or other small objects to count

Assignments
- Complete Warm-up.
- Read and complete pages in Math in Focus 1A.
- Complete pages in Workbook 1A.
- Complete Practice Questions.

LEARN

WARM-UP
Write the number and the word. How many frogs are in the ten frame?

![Ten Frame with Frogs](image)

Warm-up Answer:

9, nine

TEACHING NOTES

INSTRUCTION
When you compare two sets of objects, one set may have more, or fewer, or the same amount as the other set.

There are more apples in the basket than out of the basket.
There are fewer big bugs than little bugs.

There is the same amount of dogs as there are bones.

TEACHING NOTES

You can work with your student to practice comparing sets. Have your student set out 3 plates and 5 coins.

Then have him place one coin on each plate.

Make sure he notices that there are 2 coins left over. Ask: Which set has more? (coins) Which set has fewer? (plates).

If your student is having difficulty with this process and says there are more plates “because they are bigger,” try spacing the objects so they line up in a one-to-one correspondence.

Working with concrete examples encourages your student to use one-to-one correspondence to compare the number of objects. You may have him act out an exercise in the textbook with concrete objects. Include examples where the number of objects is the same.

Repeat this process with different amounts of plates and coins.
PRACTICE
Read and complete pp. 13 and 15 in *Math in Focus 1A*. Then complete pp. 7–9 in *Workbook 1A*.

TEACHING NOTES

TEXTBOOK ANSWER KEY

WORKBOOK ANSWER KEY

WRAP-UP
You have learned how to compare two sets of objects.

Pretend there will be 8 children at a picnic. Andrew will bring 8 forks. Will Andrew bring enough forks?

Compare the number of forks and the number of people. You can match the number of forks to the number of people. There are 8 people and 8 forks.

The number of people and the number of forks are the same.

Jo brings 10 sandwiches to the picnic.

There are more sandwiches than people.

There are fewer people than sandwiches.

PRACTICE QUESTIONS
Please go online to view and submit this assessment.
LEARN

WARM-UP

Geoff buys a bag of 6 oranges from the grocery store. He has 8 people in his family. Can everyone have an orange?

Make a drawing for this problem on a piece of paper. Solve the problem by matching the two sets of objects.

TEACHING NOTES

Warm-up Answers:
There are 6 oranges and 8 people. There are fewer oranges than people. Not everyone will get an orange.

Check your student's drawing for accuracy.

Your student may still need to use concrete objects to help with one-to-one correspondence. If necessary, have your student act out this problem, using plates or bowls to represent the people and coins to represent the oranges.

INSTRUCTION

When you compare objects you say more or fewer. But when you compare numbers you will use the terms greater than and less than.
There are fewer red cubes than blue cubes.

4 is less than 6.

There are more dots in the first frame.

6 is greater than 4.

The terms greater than and less than may be new to your student. Display two sets of unequal objects. Write the term greater than on a small piece of paper or index card, and place it on top of the correct pile. Write the term less than on another index card, and do the same. For example, you could show five coins under the greater than card and three coins under the less than card. Also point out that the word greater has more letters than the word less.

PRACTICE
Read and complete pp. 16–19 in Math in Focus 1A. Then complete pp. 10–12 in Workbook 1A.

TEACHING NOTES
TEXTBOOK ANSWER KEY
WORKBOOK ANSWER KEY

Have your student tell you why he chose the different groups as his answers for the questions on pp. 18–19 in Math in Focus 1A.

This will begin to prepare him for giving constructed responses.

A constructed response allows students to show what they know and how they got their answer, using words, pictures, number sentences, and so on.
ENRICHMENT
Compare groups of small objects greater than 10. Write a sentence about the sets of objects. For example: 25 buttons is less than 32 toothpicks.

TEACHING NOTES
For the Enrichment, set out groups of small objects greater than 10 for your student to compare.

WRAP-UP
There are many ways to compare numbers.

- You can use connecting cubes.

![Connecting Cubes]

7 is greater than 4.

- You can use a ten frame to compare numbers.

![Ten Frame]

3 is less than 4.

QUICK CHECK
Please go online to view and submit this assessment.
MORE TO EXPLORE

Watch this video to review comparing and ordering numbers.

Please go online to view this video ▶
Today you will learn how to compare groups.

Remember that when you join 10 cubes together into a number train, you are making a ten.

When you have 10 connecting cubes in front of you, put them together to make a train.

Keep going until you have 2 trains. The first person to make 2 trains wins.

TIP: Remember that when you join 10 cubes together into a number train, you are making a ten.

Warm-up Answer:

Check your student’s work for accuracy.
Which Set Has More?

Look at these sets of fruit. Which set has more? Which set has less?

There are 12 oranges and 11 apples. So there are more oranges than apples. There are fewer apples than oranges.

Comparing Numbers

You can also compare numbers. Look at the oranges and apples again. The set of 12 oranges is more than the set of 11 apples, so 12 is greater than 11.

Using Symbols to Compare

You can show greater than, less than, and equal to with symbols.

> means greater

< means less

= means equal

13 is greater than 11: 13 > 11

12 is less than 16: 12 < 16

15 is equal to 15: 15 = 15

TEACHING NOTES

Provide opportunities to compare sets of objects and numbers. Your student should be able to use both types of language: more and fewer to compare sets of objects and greater than and less than to compare numbers. Have him model the comparisons with connecting cubes and write the relationship using the correct symbols.

If your student has difficulty with the greater than and less than symbols, think of a fish's mouth. Show your student how the fish's mouth is open to the greater number.

If your student has trouble comparing groups of numbers, allow him to use one-to-one correspondence by crossing off or removing an equal number of objects from each group until only one group has any objects left.
PRACTICE

Read and complete pp. 181-184 in *Math in Focus 1A*. Then complete pp. 177–181 #1-8 in the *Workbook 1A*.

TEACHING NOTES

TEXTBOOK ANSWER KEY
WORKBOOK ANSWER KEY

WRAP-UP

You can compare sets of objects. Use the words **more**, **fewer**, and **the same**.

There are 14 stars and 18 circles. There are **fewer** stars. There are **more** circles.

You can compare numbers. Use the words **greater than**, **less than**, or **equal to**.

19 is **greater than** 13.

13 is **less than** 19.

13 is **equal to** 13.

You can use symbols to make compare numbers.

19 > 13

13 < 19

13 = 13

PRACTICE QUESTIONS

Please go online to view and submit this assessment.
Compare and Order Numbers to 20 - Part 4

LEARN

INTERACTIVE ACTIVITY
Go to BrainPop Jr. Comparing Numbers. Watch the video. Then try the other activities.

RATE YOUR UNDERSTANDING
Please go online to view and submit this assessment.
**LEARN**

**WARM-UP**

Play a game called **Guess My Number**: 

1. Use your connecting cubes to make a number greater than 10.
2. Put it in your place-value chart.
3. Ask your Learning Guide to guess the number.

Take turns with your Learning Guide following steps 1–3.

**TEACHING NOTES**

**Warm-up Answer:**
Check your student's work for accuracy.

Have fun with this activity. Deliberately give some wrong answers so that your student can correct you. Provide an opportunity to explain why your answers are incorrect. Play several times.

**INSTRUCTION**

You can use place value to compare 3 numbers.

Compare 15, 11, 14.

Write numbers in a place-value chart.

Which number is the greatest?

Look at the tens place first. Every number has 1 ten.
Look at the ones place. Which number has the greatest amount of ones?

<table>
<thead>
<tr>
<th>Tens</th>
<th>Ones</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>1</td>
<td>4</td>
</tr>
</tbody>
</table>

Five ones are greater than 4 ones and 1 one. The number 15 is the greatest number.

Which number is the least? Look at the ones place.

1 one is less than 4 ones or 5 ones. The number 11 is the least number.

If your student struggles to count the objects, remind him that he can group ten and then count on. If he needs practice ordering numbers from least to greatest and greatest to least, count out sets of household objects. Guide your student to group the tens in each set first and then compare the ones. Once he can compare sets of objects, have him write the number in a place-value chart. Have him compare the tens first. If they are all equal, compare the ones.

Read and complete pp.185–187 in Math in Focus 1A. Then complete pp. 182–184 in the Workbook 1A.

You can use place value to compare numbers.

Always compare the tens first. If the tens are equal, compare the ones.

Compare 10, 15, and 13.

- The tens are all equal. Look at the ones.
- Zero is less than 3. Three is less than 5.
- Ten is the least number. Fifteen is the greatest number.
Zero is less than 3. Three is less than 5. Ten is the least number. Fifteen is the greatest number.

Please go online to view and submit this assessment.
**Compare and Order Numbers to 20 - Part 6**

**Objectives**
- Identify and continue a number pattern.
- Use models to demonstrate mathematical concepts and/or solve problems.

**Books & Materials**
- Math in Focus 1A
- Workbook 1A
- Connecting cubes of different colors

**Assignments**
- Complete Warm-up.
- Read and complete pages in Math in Focus 1A.
- Complete pages in Workbook 1A.
- Complete Quick Check.

---

**LEARN**

Read and complete p. 188 in *Math in Focus 1A*.

---

**WARM-UP**

Work together to complete this activity, which reviews ordering numbers in a problem-solving context. Solve the first example with your student. He should identify independently that 15 is the greatest number and 11 is the least number. Have him make these numbers with connecting cubes and let him experiment to see how to make the trains the same length.

---

**TEACHING NOTES**

Use your connecting cubes to make a pattern like the one in the book.

What is the pattern?

Each number is 1 more.

After 16, which number comes next?

17 comes next in the pattern.

Continue the pattern until you get to 20.
In the **Guided Practice** on p. 190, ask your student to identify what is different about the pattern for question 4. (It is in descending order.)

Have your student practice with the connecting cubes to help visualize the patterns. Say: Build a train of 14. Count out 2 more cubes. Add them to the train of 14 cubes. How many do you have now? Add 2 more. How many are there now?

---

**PRACTICE**

Read and complete pp. 189–191 in *Math in Focus 1A*. Then complete pp. 185–186 in the *Workbook 1A*.

---

**TEACHING NOTES**

**TEXTBOOK ANSWER KEY**

**WORKBOOK ANSWER KEY**

---

**ENRICHMENT**

Make number trains with different amounts of connecting cubes. Find these number patterns:

- 3 more and 3 less
- 4 more and 4 less
- 5 more and 5 less

Use mental math to find these patterns.

---

**TEACHING NOTES**

**Enrichment Answer:**

Check your student's work for accuracy.
WRAP-UP
This group of connecting cubes shows the pattern 1 more.

1
2
3
4

One more than 4 is 5.
The next number in the pattern is 5.

This group of connecting cubes shows the pattern 1 less.

6
5
4
3

One less than 3 is 2.
The next number in the pattern is 2.

You can add or take away cubes to show 1 more, 2 more, 1 less, or 2 less. These are all patterns.

✔️ QUICK CHECK
Please go online to view and submit this assessment.

🍃 MORE TO EXPLORE
If you answered incorrectly, review the meaning of the word less. Remember to count back one from 16 to get 15, and then count back once more to get 14. Use a number line to model. For additional practice find 3 less, 4 less, and 7 less than 16.
LEARN

WARM-UP
Make a pattern with your attribute shapes.

TEACHING NOTES
Warm-up Answer:
Check your student's work for accuracy.

INSTRUCTION
You can use connecting cubes to help you put numbers in order.

Ordering from Least to Greatest Using Number Trains

These numbers are not in order.

14, 16, 12

Make three number trains, one with 14 cubes, one with 16 cubes, and one with 12 cubes.

Put the numbers in order from least to greatest.

To find the least number, look for the shortest train.

The train with 12 cubes is the shortest.

Twelve is the least number.
To find the greatest number, look for the longest train.

The train with 16 cubes is the longest.

**Sixteen is the greatest number.**

The train with 14 cubes is neither the longest nor the shortest. It will go in the middle.

From least to greatest, the numbers are 12, 14, 16.

When you order number trains from least to greatest, the trains go up like a set of stairs.

Your student can also use a place value chart when ordering numbers. For example, have him order 12, 6, and 19 from greatest to least. He can draw a chart on a piece of paper and fill in the numbers as shown. Guide him to recognize that 6 is the least because it does not have a digit in the tens place. Since both 12 and 19 have one ten, he will compare the 2 and the 9.

If your student has difficulty with the concepts of lesser and greater, encourage the use of the connecting cubes and place-value chart. Allow any method your student finds helpful.
To find the greatest number, look for the longest train. The train with 16 cubes is the longest. Sixteen is the greatest number.
The train with 14 cubes is neither the longest nor the shortest. It will go in the middle.
From least to greatest, the numbers are 12, 14, 16. When you order number trains from least to greatest, the trains go up like a set of stairs.

Your student can also use a place value chart when ordering numbers. For example, have him order 12, 6, and 19 from greatest to least. He can draw a chart on a piece of paper and fill in the numbers as shown. Guide him to recognize that 6 is the least because it does not have a digit in the tens place. Since both 12 and 19 have one ten, he will compare the 2 and the 9.

If your student has difficulty with the concepts of lesser and greater, encourage the use of the connecting cubes and place-value chart. Allow any method your student finds helpful.

WRAP-UP
You can put numbers in order. You can order numbers from greatest to least or from least to greatest. You can use connecting cubes.
The shortest train is the least number.
The longest train is the greatest number.

PRACTICE QUESTIONS
Please go online to view and submit this assessment.
Use the words and numbers to write at least 10 sentences.
You may use the words and numbers more than once.

8 more than 18 less than 15 7

is

Supported file formats: PDF, JPG, GIF, PNG
USE FOR MASTERY GUIDELINES & RUBRIC

Did you:

- Write at least 10 true statements using the numbers and words given?
- Check all your work?
LEARN

WARM-UP

Play a game called One-Two More, One-Two Less.

1. Choose a rule: one more than, one less than, two more than, or two less than.
2. Your Learning Guide will say a number between 1 and 10.
3. Use the rule, and give the new number.

Example: You choose the rule two more than. Your Learning Guide says 5, so you say 7. Seven is two more than 5.

Take turns choosing the rule and giving the number.

TEACHING NOTES

Warm-up Answer:
Check your student’s work for accuracy.

Encourage your student to complete this activity using mental math. If she has difficulty, have her repeat the number you say and build the number with connecting cubes. Continue taking turns to play this game.

INSTRUCTION

Counting On

The number 10 is an important number. To count numbers from 10–20, you begin with 10 and add on one number at a time to count to 20.
Count on from 10 to 20.

10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20

Read these number words:

ten, eleven, twelve, thirteen, fourteen, fifteen, sixteen, seventeen, eighteen, nineteen, twenty

Have your student model each of the numbers with connecting cubes to emphasize the relationship between the numbers and what they represent. Have her make groups of ten with connecting cubes to model place value. Her knowledge of these basic skills will aid her in this and later units.

Read and complete pp. 52–56 in Math in Focus 1B.

Provide additional practice if your student struggles to recognize numbers 1–20 and their word forms.

You can count numbers to 20. How many counters are in the ten frames?

There are 10 counters in one frame and 5 counters in the other.

There are 15 counters.

10 + 5 = 15

You can show a number with a place-value chart.
The 1 shows 1 ten. The 4 shows 4 ones.
1 ten and 4 ones make 14.
\[ 14 = 10 + 4 \]

You can use place value to compare numbers. Compare 11 and 17.

First look at the tens. Both numbers have 1 ten.
Look at the ones. One is less than 7, so 11 is less than 17.

✅ PRACTICE QUESTIONS

Please go online to view and submit this assessment.
# Numbers to 120 - Part 2

## Objectives
- Count numbers from 21 to 40.
- Use place value to represent numbers.
- Read and write the numbers 21–40 in numerals and words.

## Books & Materials
- Math in Focus 1B
- Workbook 1B
- Math in Focus - Teacher Edition
- 40 connecting cubes
- base-ten blocks
- Math Journal
- index cards (Optional)

## Assignments
- Complete Warm-up.
- Write numbers in your Math Journal.
- Read and complete pages in Math in Focus 1B.
- Complete pages in Workbook 1B.
- Complete Practice Questions.

## LEARN

### WARM-UP
Practice counting from 1 to 20. Once you reach 20, practice counting backward to 0. Try starting at 2 and skip counting by 2s to 20. Can you skip count backwards?

### INSTRUCTION
You can use connecting cubes to count out 40. Follow along with the book on pp. 57–58.

You will make 1 ten and then count on. As you get to another group of 10 cubes, you will join them to create another 10. This will help you keep track of the amount as you are counting.

Count out another 10 cubes. Now you have 3 number trains. You have 3 tens.

You also have 10 extra connecting cubes. You have 10 ones. What can you do with the 10 ones?

You can make another number train of 10 cubes.

---

**TEACHING NOTES**

**Warm-up Answer:**
Check your student’s work for accuracy.

If your student has difficulty counting backward, have her write the numbers 1–20 on a piece of paper. Starting at 20, have her point to each number as she counts backward.
Connect the 10 connecting cubes to make a ten. Now you have 4 tens. Four tens is the number 40.

Write the numbers from 21–40 and their names in your Math Journal.

You can show the number 40 with 4 ten-rods like this:

What number do these base-ten blocks show?
There are 2 ten-rods. There are 5 unit cubes.
2 tens and 5 ones show the number 25.
20 + 5 = 25

What number do these base-ten blocks show?
There are 3 ten-rods. There are 7 unit cubes.
3 tens and 7 ones is 37.
30 + 7 = 37

**TEACHING NOTES**

Guide your student as she builds number trains with 10 cubes. Help your student to make the connection between the 10 connecting cubes, the ten-rod, and the number 10.

**Tip:** Write the numbers 21–40 in numerals and words on note cards for your student to study as needed.

**PRACTICE**

Read and complete pp. 57–62 in *Math in Focus 1B*. Then complete pp. 45–48 in *Workbook 1B*. 
Today you learned to count and read numbers from 21 to 40.

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>21</td>
<td>twenty-one</td>
<td>22</td>
<td>twenty-two</td>
<td>23</td>
</tr>
<tr>
<td>26</td>
<td>twenty-six</td>
<td>27</td>
<td>twenty-seven</td>
<td>28</td>
</tr>
<tr>
<td>31</td>
<td>thirty-one</td>
<td>32</td>
<td>thirty-two</td>
<td>33</td>
</tr>
<tr>
<td>36</td>
<td>thirty-six</td>
<td>37</td>
<td>thirty-seven</td>
<td>38</td>
</tr>
</tbody>
</table>

You can show numbers with connecting cubes and base-ten blocks.

There are 2 ten-rods. There are 4 unit cubes.

2 tens and 4 ones is 24.

20 + 4 = 24

Please go online to view and submit this assessment.
Numbers to 120 - Part 3

Objectives
- Use place value to represent numbers.

Books & Materials
- Math in Focus 1B
- Workbook 1B
- counters
- 3 small cups
- connecting cubes
- base-ten blocks
- place-value mat

Assignments
- Complete Warm-up.
- Read and complete pages in Math in Focus 1B.
- Complete pages in Workbook 1B.
- Complete Math Checkpoint.

LEARN

WARM-UP
Use connecting cubes or base-ten blocks to show the following numbers.

TIP
The digit on the left is in the tens place. The digit on the right is in the ones place.

1. 24
2. 36
3. 29
4. 31
5. 40

TEACHING NOTES

Warm-up Answer:
Check your student’s work for accuracy.

For the Instruction, supply your student with the Place-value Mat. The three sections will need to be taped together. Your student should not write on the mat, but she can use it to place the base-ten blocks.

INSTRUCTION

Pretend you are baking some blueberry muffins. You want to have 10 blueberries in each muffin.

Pretend your counters are the blueberries. Count out 10 counters. Place them in a small cup, as if the cup is the muffin you will put in the oven.

You just made a group of 10.

Count out 10 more counters and put them in another cup.

Now you have 2 groups of ten. How many counters do you have altogether? 20

How many muffins can you bake with 20 blueberries? You can bake 2 muffins.

Using Place-value Charts
Empty the cups. This time, count out 24 counters and place them on your workspace.

If you put 10 counters in each cup, how many cups can you fill? You can fill 2 cups. You have 2 tens.

How many counters do you have left over? There are 4 counters left over. You have 4 ones. Each counter stands for 1 one.
Pretend your counters are the blueberries. Count out 10 counters. Place them in a small cup, as if the cup is the muffin you will put in the oven.

You just made a group of 10.

Count out 10 more counters and put them in another cup.

Now you have 2 groups of ten. How many counters do you have altogether?

20

How many muffins can you bake with 20 blueberries?

You can bake 2 muffins.

**Using Place-value Charts**

Empty the cups. This time, count out 24 counters and place them on your workspace.

If you put 10 counters in each cup, how many cups can you fill?

You can fill 2 cups. You have 2 tens.

How many counters do you have left over?

There are 4 counters left over. You have 4 ones. Each counter stands for 1 one.

Put the cups with the counters in them on the Tens section of your placevalue mat. Then put the leftover counters (4) on the Ones section.

Then write 2 tens and 4 ones on your place-value chart.

You just made the number 24.
Put the cups with the counters in them on the Tens section of your place-value mat. Then put the leftover counters (4) on the Ones section. Then write 2 tens and 4 ones on your place-value chart. You just made the number 24.

Provide many opportunities for your student to make a ten using 10 ones. She can group 10 beans together. She can join 10 connecting cubes to make a number train. You may even want to bake muffins with 10 blueberries or other similar food item. Have your student place her groups of tens and ones on the place-value mat to help her visualize what the manipulatives represent.

Read and complete pp. 63–65 in Math in Focus 1B. Then complete pp. 49-50 Workbook 1B.

Allow your student to model each problem with base-ten blocks, connecting cubes, or counters.

Today you learned about place value.

Look at the number 35.

The first digit tells how many tens. There are 3 tens.
The second digit tells how many ones. There are 5 ones.

You can also show numbers in a place-value chart with base-ten blocks.
Quick Check

Please go online to view and submit this assessment.

More to Explore

If you answered incorrectly, try counting ten for each box and then count each crayon individually.
# Numbers to 120 - Part 4

## Objectives
- Count numbers from 21 to 40.
- Use place value to represent numbers.
- Use place value to compare and order numbers 21–40.
- Identify and continue a number pattern.

## Books & Materials
- Math in Focus 1B
- Math in Focus - Teacher Edition
- place-value charts
- connecting cubes or base-ten blocks (Optional)

## Assignments
- Complete Warm-up.
- Read and complete pages in Math in Focus 1B.
- Complete Practice Questions.

## LEARN

### WARM-UP

**Mental Math**

1. Skip count by 2s from 2 to 40.
2. Count backward from 40 to 1.

### TEACHING NOTES

**Warm-up Answer:**
Check your student's responses for accuracy.

### INSTRUCTION

On p. 178 in *Math in Focus 1B*, you will see a lot of different kinds of living things in the picture.

Count the flowers on the wall.

There are 10 of them.

If you count all of the living things, there are over 40. In this chapter you will learn about numbers all the way to 100.

### TEACHING NOTES

If your student needs additional practice with place value, use connecting cubes or base-ten blocks to practice building numbers between 21 and 40. She can use the manipulatives to compare numbers in the place-value chart.

---

Grade 1 Calvert Math in Focus 75 Unit 1
PRACTICE

Read and complete pp. 178–187 in *Math in Focus 1B*.

TEACHING NOTES

TEXTBOOK ANSWER KEY

WRAP-UP

You can use several different strategies when working with numbers to 100. You can represent numbers with base-ten blocks and number cubes.

![Base-ten blocks and number cubes]

<table>
<thead>
<tr>
<th>Tens</th>
<th>Ones</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>7</td>
</tr>
</tbody>
</table>

You can also use a place-value chart to compare numbers.

<table>
<thead>
<tr>
<th>Tens</th>
<th>Ones</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>9</td>
</tr>
</tbody>
</table>

Patterns also can be used to find numbers.

PRACTICE QUESTIONS

Please go online to view and submit this assessment.
Numbers to 120 - Part 5

Objectives
- Count numbers from 41 to 100.

Books & Materials
- Math in Focus 1B
- Workbook 1B
- Math in Focus - Teacher Edition
- hundred chart
- base-ten blocks
- counters
- index cards

Assignments
- Complete Warm-up.
- Read and complete pages in Math in Focus 1B.
- Complete pages in Workbook 1B.
- Complete Practice Questions.

LEARN

WARM-UP

Look at the number chart. Start with the number 21. Point to each number as you count. Say the missing numbers.

<table>
<thead>
<tr>
<th>21</th>
<th>22</th>
<th>24</th>
<th>25</th>
<th>26</th>
<th>27</th>
<th>29</th>
<th>30</th>
</tr>
</thead>
<tbody>
<tr>
<td>31</td>
<td>32</td>
<td>33</td>
<td>35</td>
<td>36</td>
<td>38</td>
<td>39</td>
<td>40</td>
</tr>
</tbody>
</table>

TEACHING NOTES

WARM-UP ANSWERS

23, 28, 34, 37

INSTRUCTION

Counting Tens

Make the number 40 with your base-ten blocks.
Add one ten-rod. What number do your base-ten blocks show now?

Add one more ten-rod. What number did you make?

This number is 60, or sixty.

Add on one more ten-rod at a time.

Seven tens = 70 (seventy)
Eight tens = 80 (eighty)
Nine tens = 90 (ninety)
Ten tens = 100 (one hundred)

Regroup your 10 ten-rods into 1 hundred-square.

One hundred-square shows the number 100. Write the number 100 with two words:

one hundred

Counting Tens and Ones

You can use your unit cubes to show numbers with tens and ones.

Look at this group of base-ten blocks. What number do the blocks show? How many tens are there? How many ones?

There are 4 tens and 6 ones.

40 and 6 make 46, or forty-six.
Count this group of base-ten blocks. What number do they show? How many tens are there? How many ones?

There are 4 tens and 6 ones.

40 and 6 make 46, or forty-six.

Count this group of base-ten blocks. What number do they show? How many tens are there? How many ones?

There are 7 tens and 5 ones.

70 and 5 make 75 or seventy-five.

Have your student write the numbers and words for 50, 60, 70, 80, 90, and 100 on index cards. She can use these cards as a reference when she is writing the numbers as words. Model how to write the number one hundred as two separate words. Have her practice writing a few number words. For example, say the number 63 and have her write sixty-three. Say 94 and have her write ninety-four. Point out that these number words use a hyphen between the tens and the ones.

Print out the hundred chart, then use it practice counting to 100. Ask your student to point to each number as she counts by 10s.

Review your work from pp. 182–184 in Math in Focus 1B. Then complete pp. 147–148 in Workbook 1B.

In this lesson, you learned to count to 100.

You can count by 10s.

10, 20, 30, 40, 50, 60, 70, 80, 90, 100

ten, twenty, thirty, forty, fifty, sixty, seventy, eighty, ninety, one hundred
10 tens make 100.

You can write numbers with tens and ones.

There are 6 tens and 3 ones.

60 and 3 make 63, or sixty-three.

**INTERACTIVE ACTIVITY**

In *Okta's Rescue*, you will practice counting.

Choose a level, then click the Start button. Play the game by clicking the number of Okta's represented by the number in the number on the screen. Press the green arrow when the correct number of Oktas are lined up. Finish as many as you can before time runs out. Then move the meter down the scale to see how many you have saved total.

**PRACTICE QUESTIONS**

Please go online to view and submit this assessment.
Numbers to 120 - Part 6

Objectives
- Count numbers from 41 to 100.
- Use grouping by tens to estimate a number 100 or less.

Books & Materials
- Math in Focus 1B
- Workbook 1B

Assignments
- Complete Warm-up.
- Read and complete pages in Math in Focus 1B.
- Complete pages in Workbook 1B.
- Complete Quick Check.

LEARN

WARM-UP

Point to each number as you count in this chart. Say the missing numbers.

<table>
<thead>
<tr>
<th>41</th>
<th>42</th>
<th>43</th>
<th>44</th>
<th>45</th>
<th>47</th>
<th>48</th>
<th>49</th>
<th>50</th>
</tr>
</thead>
<tbody>
<tr>
<td>51</td>
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<td>91</td>
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<td>93</td>
<td>94</td>
<td>95</td>
<td>96</td>
<td>97</td>
<td>98</td>
<td>99</td>
</tr>
</tbody>
</table>

WARM-UP ANSWERS:
missing numbers: 46, 53, 59, 67, 68, 72, 73, 80, 90, 92

TEACHING NOTES

WARM-UP ANSWERS:
missing numbers: 46, 53, 59, 67, 68, 72, 73, 80, 90, 92
INSTRUCTION

Look at these connecting cubes. How many cubes are there? You can count by 10s and then count on by 1s.

10, 20, 30, 40, 50, 60, 61, 62, 63, 64

There are 64 cubes.

It did not take long to count the cubes because you counted groups of 10. You could count by 10s instead of counting each cube by 1s.

Now look at these paper clips. Can you quickly count to find how many paper clips there are?

No, the paper clips are not easy to count. They are not in groups of 10.

Estimating Groups of 10

Instead of counting all the paper clips, you can estimate the number of paper clips. When you estimate, you give your best guess. You do not count every object.

About how many paper clips are there?

You can estimate the number of groups of 10. Count and circle 10 paper clips. The circle shows what a group of 10 paper clips looks like.

Now look at the rest of the paper clips. Guess how many more groups of 10 you can make. Make your guess without counting.

You can make about 4 more groups of 10. You have about 5 groups of 10 in all.

Five tens make fifty. There are about 50, or fifty, paper clips.
Today you learned how to estimate. When you estimate, you give your best guess. You can estimate by counting 1 group of ten.

Then estimate how many more groups of 10 you could make without counting them.

You could make about 4 groups of 10.

Four tens make 40. There are about 40 cars.

If you count the cars, you will count 48 cars.

Forty is the estimate.

Forty-eight is the exact number.
MORE TO EXPLORE

If you answered incorrectly, point and count by tens for each ten block and then point to each single cube and count up one for each one.
Numbers to 120 - Part 7

**Objectives**
- Use place value to represent numbers.

**Books & Materials**
- Math in Focus 1B
- Workbook 1B
- *Math in Focus - Teacher Edition*
- place-value charts
- base-ten blocks
- craft sticks (Optional)
- rubber bands (Optional)

**Assignments**
- Complete Warm-up.
- Read and complete pages in Math in Focus 1B.
- Complete pages in Workbook 1B.
- Complete Practice Questions.

---

**LEARN**

**WARM-UP**

Use base-ten blocks to show these numbers.

1. 36
2. 58
3. 83

---

**TEACHING NOTES**

**WARM-UP ANSWERS**

1. [Base-ten blocks for 36 shown]
2. [Base-ten blocks for 58 shown]
3. [Base-ten blocks for 83 shown]
INSTRUCTION

You can use a place-value chart to show numbers.

Example

Look at the picture of the cupcakes. How many cupcakes are there?

There are 4 groups of 10 cupcakes. There are 8 more cupcakes.

40 and 8 make 48.

There are 48 cupcakes.

You can use a place-value chart to show 48 cupcakes.

Make the number with your base-ten blocks. How many tens are there? How many ones?

There are 4 tens. Write 4 in the tens column.

There are 8 ones. Write 8 in the ones column.

4 tens 8 ones = 48

Guide your student to place the digits correctly in the place-value chart. Provide additional practice modeling numbers to 100 with the base-ten blocks, if necessary. Have your student count and say the number of tens and ones and the numeral the blocks represent. You may also want to have her practice writing the numbers in word form.

If you feel that your student needs additional practice, have her use craft sticks and rubber bands to complete Hands-On Activity on p. 194 in Math in Focus 1B.
WRAP-UP

You can use a place-value chart to show numbers.

There are 6 ten-rods and 2 unit cubes. You can write 6 tens and 2 ones in a place-value chart.

Write 6 in the tens column. Write 2 in the ones column.

6 tens 2 ones = 62

PRACTICE QUESTIONS

Please go online to view and submit this assessment.
LEARN

WARM-UP

Write each of these numbers as words.

1. 15
2. 67
3. 100

TEACHING NOTES

WARM-UP ANSWERS:

1. fifteen
2. sixty-seven
3. one hundred

INSTRUCTION

Today, you will learn to count numbers greater than 100.

You can use base-ten blocks to show 100.

One hundred-square shows the number 100.
Add one unit cube.

You have 1 more than 100, or 101.
Say: one hundred one.
There are no tens. The zero in 101 shows that this number has no tens.

Now add another unit cube. What number do your base-ten blocks show?

102, or one hundred two

Add another unit cube. Now what number do you have?

103, or one hundred three

If you add another unit cube, what number will you make?

104, or one hundred four

Do you see a pattern? You say one hundred for the hundred-square. Then you say the number of unit cubes.

What will be the next number?

105 (one hundred five)

Build these numbers with your base-ten blocks:

106 (one hundred six)
107 (one hundred seven)
108 (one hundred eight)
109 (one hundred nine)

If you add one more unit cube, how many will you have?

You have 10 unit cubes.
What do you need to do with the 10 unit cubes?
Regroup the 10 unit cubes into 1 ten-rod.

This is the number 110.
Say: one hundred ten.

Add one more unit cube. What number do the base-ten blocks show now?

111
Say: one hundred eleven.

Add on 1 unit cube at a time to count these numbers:

112 (one hundred twelve)
113 (one hundred thirteen)
114 (one hundred fourteen)
115 (one hundred fifteen)
116 (one hundred sixteen)
117 (one hundred seventeen)
118 (one hundred eighteen)
119 (one hundred nineteen)

When you add on one more unit cube, you have 10 unit cubes. What do you need to do?

Regroup the 10 unit cubes into another ten-rod.

What number do your blocks show now?

120 (one hundred twenty)
You may want to have your student write the numbers 101–120 as numbers and words on index cards to use as a reference. Make sure that she reads and writes the numbers correctly. Point out that she should not write the word *and* after *one hundred* (ex., *one hundred six*, not *one hundred and six*).

Watch how she reads and writes numbers such as 101 and 110. Point out that for the numbers 101–109, the 0 indicates that there are no tens.

Complete **Numbers to 120 Worksheet**.

**Numbers to 120 Worksheet Answers:**

1. a 102 b 115 c 120
2. a 105 b 108 c 110 d 114 e 120
3. 101, 105, 107, 110, 113, 116, 118, 120
4. a one hundred two b one hundred eight c one hundred ten d one hundred fifteen e one hundred twenty

Today you learned how to count numbers greater than 100.
You may want to have your student write the numbers 101–120 as numbers and words on index cards to use as a reference. Make sure that she reads and writes the numbers correctly. Point out that she should not write the word **and** after **one hundred** (ex., one hundred six, not one hundred and six).

Watch how she reads and writes numbers such as 101 and 110. Point out that for the numbers 101–109, the 0 indicates that there are no tens.

Complete Numbers to 120 Worksheet.

**Numbers to 120 Worksheet Answers:**

1. a 102 b 115 c 120
2. a 105 b 108 c 110 d 114 e 120
3. 101, 105, 107, 110, 113, 116, 118, 120
4. a one hundred two b one hundred eight c one hundred ten d one hundred fifteen e one hundred twenty

Today you learned how to count numbers greater than 100.

Please go online to view and submit this assessment.
Numbers to 120 - Part 9

Assignments
- Complete Interactive Activity.
- Complete Rate Your Understanding.

LEARN

INTERACTIVE ACTIVITY

You can use interactive Ten Frames to practice counting numbers to 120.

TEACHING NOTES

You can try two different activities with your student.

1. Click on the frame icon at the top of the menu on the left and select up to 9 ten frames. Give your student a number that is slightly greater than the number of ten frames you have selected. (For example, if you select 4 ten frames, you might give your student the number 46.) Your student should then drag the appropriate number of counters to fill the frames and tell you the number. (You may want to point out that counters can be dragged to the screen in groups of 10 to make this job faster.) Then have your student click on the Drawing Tools icon at the bottom right and write the numeral for the number of counters on the screen.

2. Simply drag a number of counters (up to 120) onto the screen. Be sure to drag them in groups of ten to emphasize place value. Ask your student to count the total number of counters and write the numeral on the screen.
Just for fun, your student may want to click on the counter icon at the bottom of the menu on the left to change the color and shape of the counters.

✅ RATE YOUR UNDERSTANDING

Please go online to view and submit this assessment.
Numbers to 120 - Part 10

Assignments
- Complete Use For Mastery.

USE

USE FOR MASTERY

A. Write the number.
   ninety-eight

B. Write the number in the place-value chart.

<table>
<thead>
<tr>
<th>Tens</th>
<th>Ones</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

C. Count on. Write the next five numbers.

1. 
2. 
3. 
4. 
5. 
D. Tell how you found the next five numbers.

<table>
<thead>
<tr>
<th>B</th>
<th>I</th>
<th>U</th>
<th>☐</th>
<th>☐</th>
</tr>
</thead>
</table>

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USE FOR MASTERY GUIDELINES & RUBRIC

Did you:

- Write the number ninety-eight correctly?
- Write the number of tens and the number of ones correctly?
- Correctly count the next five numbers starting from 98?
- Explain how you found the next five numbers? Did you explain a strategy for counting up that will always work?
Comparing and Ordering Greater Numbers - Part 1

Objectives
- Use place value to compare and order numbers 21–40.

Books & Materials
- Math in Focus 1B
- Workbook 1B
- Math in Focus - Teacher Edition
- index cards with the numbers 1–10
- counting tape
- place-value chart
- connecting cubes or base-ten blocks

Assignments
- Complete Warm-up.
- Read and complete pages in Math in Focus 1B.
- Complete pages in Workbook 1B.
- Complete Math Checkpoint.

LEARN

WARM-UP

1. Mix up your number cards and put them face down on the table.
2. Pick a card and turn it over.
3. Pick another card. Is the number on the second card greater than or less than the number on the first card?
4. Put the two cards in order from least to greatest.
5. Pick another card. Is the number on the third card greater than or less than the numbers on the first two cards?
6. Order all three cards from least to greatest.

Continue to pick up and order the number cards until you have all ten cards in order from least to greatest.

TEACHING NOTES

For the Warm-up, give your student index cards with numbers 1–10 written on one side. The other side of the cards should be blank.

Warm-up Answer:
Check your student's work for accuracy.

INSTRUCTION

You have compared numbers up to 20. Today you will compare numbers up to 40.
Using Counting Tape to Compare

Look at your counting tape. The numbers are in order from least to greatest.

You can use counting tape to compare numbers.

Using Place Value to Compare

You can also use your base-ten blocks and a place-value chart to compare numbers.

When you compare two or more numbers, look at the tens first.

There are 3 tens and 2 tens. 3 tens is greater than 2 tens.

If the tens are the same, you have to look at the ones place to compare the numbers.

Look at the ones. Which is less, 4 ones or 2 ones?

Two is less than 4, so 32 is less than 34.

Write the numbers in order from least to greatest.

21, 32, 34

Write the numbers in order from greatest to least.

34, 32, 21

TEACHING NOTES

Have your student use the counting tape and base-ten blocks as many times as needed to help her understand the concept of counting tens and counting ones when she is comparing.

You can relate the symbols < and > to a fish's mouth. Help your student draw the symbols by showing her that a fish will always eat the greater number. She may even want to draw a fish face and mouth on the symbols.
PRACTICE

Read and complete from p. 66 through the top of p. 70 in Math in Focus 1B. Then complete pp. 51–54 in Workbook 1B.

TEACHING NOTES

TEXTBOOK ANSWER KEY

WORKBOOK ANSWER KEY

If your student has difficulty comparing the sets of numbers, have her build each number with the base-ten blocks. Remind her to compare the tens first. If the tens are equal, compare the ones. Encourage her to draw the comparison symbols < and > when completing these exercises.

WRAP-UP

You can use counting tape to compare numbers.

Start at 22. Find 3 more than 22. Move your finger 3 places to the right.

The number 25 is 3 more than 22. The number 25 is greater than 22 because it is 3 more.

You can use place value to compare numbers.

Compare 22 and 25. First compare the tens.

The tens are the same, so compare the ones.

Two ones is less than 5 ones, so 22 is less than 25. You can use the symbols > and < to compare.

22 < 25 and 25 > 22
PRACTICE QUESTIONS

Please go online to view and submit this assessment.
Comparing and Ordering Greater Numbers - Part 2

Objectives
- Identify patterns created by adding 2, adding 5, and adding 10.
- Compare numbers less than 100.

Books & Materials
- Math in Focus 1B
- Workbook 1B
- Math in Focus - Teacher Edition
- number line
- blank number line
- index cards with numbers 1–9 (2 sets)
- place-value mat
- red and yellow crayons
- hundred chart

Assignments
- Complete Warm-up.
- Read and complete pages in Math in Focus 1B.
- Complete pages in Workbook 1B.
- Complete Quick Check.

LEARN

WARM-UP

1. Mix up each set of numbered index cards. Put each set in its own pile, one on the right and one on the left.
2. Pick one card from the pile on the left. Put the card in the tens column on your place-value mat.
3. Pick one card from the pile on the right. Put it in the ones column on your place-value mat.
4. Say the number you made. Then write it on paper as a number and as a word.

TEACHING NOTES

Observe as your student says and writes each number. Make sure she is using place value correctly. For example, your student should read and write the number 52 as fifty-two, not twenty-five. Have her make 5 different numbers in this way.

Warm-up Answer:
Check your student’s work for accuracy.

INSTRUCTION

In this lesson, you will use a number line to count and compare numbers.

Counting with a Number Line

Look at your number line. The numbers on the number line follow the one more pattern.
A number line can help you to find how many more or how many less.

When you count on, you move to the right (→). When you count back, you move to the left (←).

You can use the number line to find the number that is 2 more than 51.

Start at 51. Count on 2 more:

52, 53

Comparing with the Number Line

A number line can also help you compare two numbers. The number 53 is to the right of 51, so 53 is greater than 51.

You can compare the numbers with the greater than and less than symbols. Do you remember the symbols?

Think about a fish mouth. Fish always eat the greater number. The mouth will "open" to "eat" the greater number.

4 > 2
> means greater than.
< means less than.

53 > 51
Say: Fifty-three is greater than fifty-one.

51 < 53
Say: Fifty-one is less than fifty-three.

PRACTICE

Read and complete pp. 196 - 199 in Math in Focus 1B. Then complete p. 149 in Workbook 1B.
A number line can help you to find how many more or how many less. When you count on, you move to the right (→). When you count back, you move to the left (←).

You can use the number line to find the number that is 2 more than 51. Start at 51. Count on 2 more:

52, 53

Comparing with the Number Line

A number line can also help you compare two numbers. The number 53 is to the right of 51, so 53 is greater than 51.

You can compare the numbers with the greater than and less than symbols. Do you remember the symbols?

Think about a fish mouth. Fish always eat the greater number. The mouth will “open” to “eat” the greater number.

> means greater than.
< means less than.

53 > 51
Say: Fifty-three is greater than fifty-one.

51 < 53
Say: Fifty-one is less than fifty-three.

Read and complete pp. 196 - 199 in Math in Focus 1B. Then complete p. 149 in Workbook 1B.

WRAP-UP

You can use a number line to count and to compare.

Counting with the Number Line

When you count on, you move to the right. When you count back, you move to the left.

59 is two more than 57.

Comparing with the Number Line

59 is to the right of 57 on the number line, so 59 > 57.

57 is to the left of 59 on the number line, so 57 < 59.

QUICK CHECK

Please go online to view and submit this assessment.

MORE TO EXPLORE

Watch the Discovery video Comparing Numbers to review counting and comparing numbers.
Comparing and Ordering Greater Numbers - Part 3

Assignments
- Complete Interactive Activity
- Complete Rate Your Enthusiasm

LEARN

INTERACTIVE ACTIVITY
Go to Put Numbers in Order up to 120 to practice comparing greater numbers.

RATE YOUR ENTHUSIASM
Please go online to view and submit this assessment.
# Comparing and Ordering Greater Numbers - Part 4

## Objectives
- Compare numbers less than 100.

## Books & Materials
- Math in Focus 1B
- Workbook 1B
- Math in Focus - Teacher Edition
- number line (Optional)
- hundred chart (Optional)
- place-value charts
- connecting cubes or base-ten blocks

## Assignments
- Complete Warm-up.
- Read and complete pages in *Math in Focus 1B*.
- Complete pages in *Workbook 1B*.
- Complete Use For Mastery

## LEARN

### WARM-UP

Put these numbers in order from greatest to least. You may draw a number line or use a hundred chart to help you.

16, 19, 20, 35

### TEACHING NOTES

**Warm-up Answer:**

35, 20, 19, 16

### INSTRUCTION

You have used a number line and a hundred chart to compare two numbers. You can also use a place-value chart to compare numbers.

**Comparing with Different Tens**

Compare the numbers 75 and 89.

Write the tens and ones on a place-value chart.
First look at the tens. There are 8 tens in 89. There are 7 tens in 75.
Eight tens are more than 7 tens.

89 is greater than 75.

89 > 75

Comparing with Equal Tens

Now compare 86 and 89. Write the numbers in a place-value chart.

First, look at the tens. Both numbers have 8 tens. The tens are equal, so you need to look at the ones to compare the two numbers.

There are 6 ones in 86. There are 9 ones in 89.
Six ones is less than 9 ones, so 86 is less than 89.
You can compare the numbers using symbols:

86 < 89 and 89 > 86

Ordering Numbers

You can use a place-value chart to order numbers.
Write the numbers 56, 45, and 67 on a place-value chart. Place them in order from greatest to least.
First look at the tens. Are they the same?

No, they are not.

You can order the numbers by looking at the tens.

<table>
<thead>
<tr>
<th>Tens</th>
<th>Ones</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>

Which number has the greatest number of tens?

Six tens is greater than 5 tens and 4 tens, so 67 is the greatest number.

Which number has the least number of tens?

Four tens is less than 5 tens, so 45 is the least number.

The greatest number is 67, and the least number is 45. Write all three numbers in order from greatest to least.

67, 56, 45

Can you write the numbers in order from least to greatest?

45, 56, 67

PRACTICE

Read and complete from p. 201 to the top of p. 204 in Math in Focus 1B. Then complete pp. 150–151 in Workbook 1B.
WRAP-UP

You have learned how to use place value to compare and order numbers.

Comparing with Different Tens

<table>
<thead>
<tr>
<th>Tens</th>
<th>Ones</th>
<th>89 &gt; 75</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>

Comparing with Equal Tens

<table>
<thead>
<tr>
<th>Tens</th>
<th>Ones</th>
<th>86 &lt; 89</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>9</td>
<td></td>
</tr>
</tbody>
</table>

Ordering Numbers

<table>
<thead>
<tr>
<th>Tens</th>
<th>Ones</th>
<th>The numbers in order from greatest to least are: 67, 56, 46</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>7</td>
<td></td>
</tr>
</tbody>
</table>
USE FOR MASTERY

Use these numbers to fill in the blanks.
Some answers may be used more than once.
Some might not be used at all.

A. 6 tens 18 ones = [ ]

B. The greatest number is [ ]

C. The least number is [ ]

D. Which numbers could go in the blank? ___ < 75?

< 75 < 75 < 75 < 75

92
49
68
83
78
51
A. 6 tens 18 ones = 

B. The greatest number is 

C. The least number is 

D. Which numbers could go in the blank? ___ < 75? < 75 < 75 < 75

E. Explain how you got this answer.

**USE FOR MASTERY GUIDELINES & RUBRIC**

Did you:

- Provide answer for parts A through D?
- Explain how you got the answer for part D?
Unit Quiz: Numbers, Numbers Everywhere

Books & Materials

- Math in Focus - Teacher Edition

✅ UNIT QUIZ

Please go online to view and submit this assessment.
Unit 2 - Let’s Add and Subtract
PROJECT DESCRIPTION

In this project you are going to write all about the amazing adventures of a number. In this book, you will tell about some of the fun adventures that this number has had. This book will also show all of the amazing addition and subtraction you will learn throughout this unit.

PROJECT DETAILS

In this project, you will tell a story about a number between 10 and 20. To complete this project, you will:

- Put together a ten-page book and come up with a fun title
- Show a way to make this number using a words and a number bond
- Tell stories about the number using pictures, words, and numbers
- Show the number's fact family
- Share your story in a video

PROJECT RUBRIC

The Project Rubric will help you understand how your project will be scored. Your goal should be to earn all 4 points for each part.

TEACHING NOTES

The student will write a book about the adventures of a number. Begin the activity by talking about biographies. Explain that a biography is a book about someone's life. Discuss how the student will be writing a biography about a number. Encourage the student to think about the drawings and different colors he will use to illustrate his story. You may suggest that the book include things that relate to his own life. For example, if he likes to play basketball, the number could be playing basketball with his friends.

RATE YOUR EXCITEMENT

Please go online to view and submit this assessment.
**COLLABORATION**

Think about your own biography. Remember that your number might like to enjoy some of the same activities that you do. Share some of your favorite activities with your peers. Respond to at least two other classmates.
LEARN

Ways to Make a Number - Part 1

Objectives
- Define the term number train.
- Define the term number bond.

Books & Materials
- Math in Focus 1A
- Math in Focus - Teacher Edition
- connecting cubes

Assignments
- Complete Warm-up.
- Read and complete pages in Math in Focus 1A.
- Complete Practice Questions.

LEARN

WARM-UP

Look at this group of crayons. Answer the questions aloud.

1. How many of the crayons are thin?
2. How many of the crayons are thick?
3. Is it certain or impossible to pick a crayon from this group?
4. Is it certain or impossible to pick a paper clip from this group?

Warm-up Answers:
1. 3 out of 5 crayons are thin.
2. 2 out of 5 crayons are thick.
3. It is certain.
4. It is impossible.

TEACHING NOTES
Today you will make number trains with connecting cubes. You will also learn to draw a number bond with number trains.

Making Number Trains

Make 2 number trains with your connecting cubes. Show the number 1.

Then show the number 3.

Put the cubes together to make a number train, and count all of the connecting cubes.

There are 4 connecting cubes in all.

Making Number Bonds

A number bond shows the parts and the whole.

Tip: If your student has difficulty drawing a number bond, explain that the two parts are connected to the whole and not to each other.

Have your student use connecting cubes to make number trains. Ask your student how many connecting cubes there are, what the parts are, and what the whole is. Understanding the part-whole relationship from number trains will help her understand number bonds. One shape is for the whole, and there are two shapes for the parts. The parts are joined to the whole by lines.

Tip: If your student has difficulty drawing a number bond, explain that the two parts are connected to the whole and not to each other.
There may be many ways to make a number bond. Encourage trying different combinations.

You may find it helpful to view the following video:

**Instructional Support Video:** [Learning About Small Numbers and Teen Numbers](#)

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**PRACTICE**

Read and complete pp. 28–29 in *Math in Focus 1A*.

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**TEACHING NOTES**

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**WRAP-UP**

You can show numbers by making a **number train**.

A **number bond** shows you the whole and the parts of a number. The two parts connect to the whole.

In the next lesson, you will learn another way to show number bonds.

---

**PRACTICE QUESTIONS**

Please go online to view and submit this assessment.
LEARN

Ways to Make a Number - Part 2

Make a number train for the number 8. Then break the number train apart to match the following picture.

Say the answers to the questions:

1. How many connecting cubes are in Part 1?
2. How many connecting cubes are in Part 2?
3. How many connecting cubes are there altogether?

Warm-up Answers:
1. 3
2. 5
3. 8

Today you will learn about making number bonds. Make a number train that is 4 connecting cubes long, like the one in the book. 4 is the whole.

Take 1 cube off. Now you have two parts. One part has 1 cube; the other part has 3 cubes.
This is a number bond that uses numbers instead of connecting cubes.

The number 6 is the whole. The numbers 5 and 1 are the parts.

There are many ways to draw a number bond.

Remember, the two parts are connected to the whole. The parts are not connected to each other.

---

**PRACTICE**

Read and complete pp. 30–32 in *Math in Focus 1A*. Then complete pp. 21–24 in *Workbook 1A*.

---

**TEACHING NOTES**

Your student may confuse the parts and the whole of the number bond. Have your student use the connecting cubes to show the two parts. Lay the cubes on a piece of paper. Model for your student how the two parts make the whole. Draw a line from each part to the whole. Help your student see that the parts are connected to the whole. Please note, students should use the connecting cubes for the Hands-On Activity at the bottom of p. 31.

Click on the link below to access the Instructional Support Resources associated with today's lesson.

**Instructional Support Video:** Learning About Small Numbers and Teen Numbers.
WRAP-UP

You can use connecting cubes and numbers to make a number bond. There are many ways to show a number bond for a given number: 4 and 5 make 9; 3 and 6 also make 9.

![Number bond diagram](image)

QUICK CHECK

Please go online to view and submit this assessment.

MORE TO EXPLORE

If you answered incorrectly, cover up the model and tell your Learning Guide which sentence is true. Then count them on your fingers. If you have trouble choosing which is true, you may just need more practice with number bonds. Create some number bonds for 3, 4, and 5 to understand how bonds are used for modeling sums. Remember to always shade the circle representing the total.
LEARN

WARM-UP

1. Mr. Wilson has 2 dogs and 3 cats. How many pets does he have?

2. Draw a number bond on separate paper to show your answer.

TEACHING NOTES

If your student confuses the parts of the number bond, remind her that the lines join the parts together to form the whole.

Warm-up Answers:

1. Mr. Wilson has 5 pets.

2. Sample number bond:
INSTRUCTION

Make the number bond using numbers. Draw three circles on your paper to show a number bond.

Which number is the whole?
The whole is 9.
Write 9 in the top circle.

The other circles represent the two parts that make up the whole. Look at your number cubes.

What are the two parts of the whole?
The numbers 5 and 4 are the parts.
Write 5 in one circle and 4 in the other circle.

There are different ways to show the same whole.

Can you find different ways to make the number 9?
You could use 8 and 1.
Draw a number bond on your paper using the parts 8 and 1.
Think of two more ways to make the number 9. Draw a number bond for each.

You can draw your number bond in any direction. The whole can be on the side (left or right) or under the parts. Try drawing your number bonds different ways.

TEACHING NOTES

Make sure your student is putting the whole in the red circle and the parts in the blue circles. Also make sure that the parts connect to the whole and not each other.

If your student is having difficulty with creating the number bonds, have her use connecting cubes in place of the numbers. This will help her to visualize the whole and parts.

Instruction Answers:

2, 7; 3, 6; 0, 9

Click on the link below to access the Instructional Support Resources associated with today’s lesson.

Instructional Support Video: Learning About Small Numbers and Teen Numbers

PRACTICE

Complete p. 33 in Math in Focus 1A using the connecting cubes. Then complete pp. 25–30 in Workbook 1A.

TEACHING NOTES

TEXTBOOK ANSWER KEY

WORKBOOK ANSWER KEY
WRAP-UP

A number bond is a picture that shows you a number and its parts. There is more than one way to draw a number bond.

![Number Bond Examples]

QUICK CHECK

Please go online to view and submit this assessment.

MORE TO EXPLORE

Remember, when making number bonds, you add the numbers in the circles that show the parts and write the sum in the circle that shows the whole. That circle is always the total. Remember to check by adding the numbers in the 2-part circles to see if the other circle shows the sum. Watch this fun video to review making number bonds.

Please go online to view this video ▶
LEARN

INTERACTIVE ACTIVITY

Get some paper and a pencil. Then open the Math Balance.

Drag a plain yellow tab from the toolbox and hang it on the 5 peg on the right side of the balance.

What happens to the balance? It leans over because it is too heavy.
Now you must hang tabs on the other side of the balance to make it even again. Can you think of two numbers that make 5?

You can use 1 and 4. Drag tabs to the 1 peg and the 4 peg on the left side of the balance.

Now the balance is even! On your paper, draw the number bond that goes with the balance.

Now try these activities.

1 Click the red circle with the arrow in it to start over. Find two more ways to make 5. Draw the number bonds on your paper.

2 Show your Learning Guide two ways to make 7.

3 Show your Learning Guide two ways to make 9.

4 Put a tab on the 5 peg on the right. Put a tab on the 5 peg on the left. Can you draw a number bond to show this on your paper?

5 Put tabs on the math balance. Have your Learning Guide draw the number bond to show what is on the balance.
6 Have your Learning Guide put tabs on the math balance. See if you can draw the number bond that goes with the balance.

### TEACHING NOTES

Guide your student as she works through the activities. Focus on keeping them fun, and allow your student to explore other possibilities, if she is interested. (For example, can she find three numbers that make 9?)

### ANSWER KEY

1 1 and 4, 2 and 3, 3 and 2 (Your student may also mention 0 and 5 or 5 and 0.)
2 1 and 6, 2 and 5, 3 and 4, 4 and 3, 5 and 2, 1 and 6 (Your student may also mention 0 and 7 or 7 and 0.)
3 1 and 8, 2 and 7, 3 and 6, 4 and 5, 5 and 4, 6 and 3, 7 and 2, 1 and 8 (Your student may also mention 0 and 9 or 9 and 0.)

4

![Number bond diagrams]

Answers will vary.

5 and 6 Answers will vary.

### RATE YOUR UNDERSTANDING

Please go online to view and submit this assessment.
Ways to Make a Number - Part 5

Objectives
- Write sentences that reflect mathematical thinking.
- Explore addition of three numbers with a sum of less than 10.
- Explore the Associative Property of Addition.
- Use number bonds (addition/subtraction fact families) to find missing addends.

Books & Materials
- Math in Focus 1A
- Workbook 1A
- Math in Focus - Teacher Edition
- Math Journal
- connecting cubes
- index cards numbered 1–10

Assignments
- Complete Warm-up.
- Complete Math Journal in Math in Focus 1A.
- Complete Let's Explore! in Math in Focus 1A.
- Complete Put on Your Thinking Cap! in Math in Focus 1A.
- Complete pages in Workbook 1A.
- Complete Practice Questions.

LEARN

WARM-UP

Draw number bonds on separate paper to solve these problems.

1. Zoe has 1 baseball card. William has 5 baseball cards. How many baseball cards do they have in all?
2. Emily and her mother go to the library. Emily checks out 3 books. Her mother checks out 4 books. How many books do they check out in all?

TEACHING NOTES

Warm-up Answers:

1. They have 6 baseball cards in all. Sample number bond:

   ![Sample number bond](image)

2. They check out 7 books. Sample number bond:

   ![Sample number bond](image)
Today you will complete some activities with number bonds.

**Math Journal**

Open your Math Journal to a new page. Turn to p. 34 in *Math in Focus 1A*. Look at the picture. The sentence at the bottom of the page tells about the picture.

Write the sentence in your Math Journal. Fill in the blanks. Can you think of another way to look at this picture?

Write another sentence in your Math Journal that describes the picture. Draw a number bond to go with the sentence.

**Let's Explore!**

Complete *Let's Explore!* on pp. 35–36 in *Math in Focus 1A*.

**Put on Your Thinking Cap!**

Turn to p. 37 in *Math in Focus 1A*. Read the page and solve the problem.

### TEACHING NOTES

**Math Journal**

Make sure your student understands how the number sentence at the bottom of the page is related to the picture. Ask: Is there anything else that can be put together in this picture? Have your student write two different sentences and draw number bonds to go with them. Possible answers: 3 boys and 4 girls make 7 children; 2 children in skirts and 5 children in shorts make 7 children; 1 child with a watch and 6 children without watches make 7 children; 1 CD player and 6 stools make 7 objects; 2 single music notes and 4 double music notes make 6 music notes.

**Let's Explore**

Look at pp. 35–36 with your student. Your student will use the same skills she already knows about making number bonds with two parts to make number bonds with three parts. Say: You already know a whole can be broken into two parts. A whole can also be broken into three or more parts.

Your student should use the connecting cubes to visualize the concept. Lead her to see that, when you add 3 numbers, it does not matter which two you put together first; (2 + 3) + 4 is the same as 2 + (3 + 4). This is called the *Associative Property of Addition*. 
**Put on Your Thinking Cap!**

The problems on p. 37 teach your student how to analyze the parts and the whole and use a number bond to help solve the problem. The three problems give the whole and one part and ask your student to use deduction to find the other part(s).

Read the instructions and the first problem with your student. Ask: What is the whole? (6) What are the parts? (2 and ?) Say: Look at the number bond to the right. The number 6 is the whole, and you know that one part is the number 2. What number can you join with 2 to make 6? (4)

Your student can also use connecting cubes to visualize the problem. Have her make a number train of 6 cubes, and break off 2 cubes.

When your student comes to the third problem, point out that there are 3 parts. Help her see that there are 5 beads under the cup on the right and no beads under the cup in the middle. Ask how many beads must be under the first cup.

---

**PRACTICE**

Complete pp. 31–32 in *Workbook 1A*.

---

**TEACHING NOTES**

**Page 31, Workbook 1A**

Look at problem 1 together. Guide your student to remember that the whole is always bigger than the part. Suggest that she choose one of the greater numbers for the whole in the number bond, then find two lesser numbers to form the parts. She can use the numbered index cards to model each step of the thinking process. Have her explain her reasoning while working.

**Page 32, Workbook 1A**

On p. 32 look at the example. Cover the bottom row of the number bond with your finger. Help your student to see that the whole (8) is broken into two parts (3 and 5). With your finger, cover up the numbers 8, 5, and 4. Ask your student to tell you about the number bond he sees. Then cover the numbers 8, 3, and 2. Ask: How are all these number bonds related? The parts of 8 (which are 3 and 5) are also the wholes of 2 and 1 (3) and 1 and 4 (5).

Have your student model problems 1 and 2 with the number cards. For the first problem, have her place the 10 card on your work space and place two cards underneath to form a number bond. Then let her experiment with the other number cards to find the third row.
Put on Your Thinking Cap!
The problems on p. 37 teach your student how to analyze the parts and the whole and use a number bond to help solve the problem. The three problems give the whole and one part and ask your student to use deduction to find the other part(s).

Read the instructions and the first problem with your student. Ask: What is the whole? (6) What are the parts? (2 and ?) Say: Look at the number bond to the right. The number 6 is the whole, and you know that one part is the number 2. What number can you join with 2 to make 6? (4)

Your student can also use connecting cubes to visualize the problem. Have her make a number train of 6 cubes, and break off 2 cubes.

When your student comes to the third problem, point out that there are 3 parts. Help her see that there are 5 beads under the cup on the right and no beads under the cup in the middle. Ask how many beads must be under the first cup.

Complete pp. 31–32 in Workbook 1A.

Page 31, Workbook 1A
Look at problem 1 together. Guide your student to remember that the whole is always bigger than the part. Suggest that she choose one of the greater numbers for the whole in the number bond, then find two lesser numbers to form the parts. She can use the numbered index cards to model each step of the thinking process. Have her explain her reasoning while working.

Page 32, Workbook 1A
On p. 32 look at the example. Cover the bottom row of the number bond with your finger. Help your student to see that the whole (8) is broken into two parts (3 and 5). With your finger, cover up the numbers 8, 5, and 4. Ask your student to tell you about the number bond he sees. Then cover the numbers 8, 3, and 2. Ask: How are all these number bonds related? The parts of 8 (which are 3 and 5) are also the wholes of 2 and 1 (3) and 1 and 4 (5).

Have your student model problems 1 and 2 with the number cards. For the first problem, have her place the 10 card on your work space and place two cards underneath to form a number bond. Then let her experiment with the other number cards to find the third row.

Sample answers:

1.  
   ![Number bond image](image1)

2.  
   ![Number bond image](image2)

Your student may come up with other ways to model and solve these problems. Accept whatever solutions can be supported by sound mathematical reasoning.

WRAP-UP
A number bond is made up of 2 or more parts. The order of the parts does not change the amount of the whole. You can also use number bonds to find missing parts.

✔️ PRACTICE QUESTIONS

Please go online to view and submit this assessment.
Look at the number bonds.

What is the value of ▲?  

Tell how you got this answer.
USE FOR MASTERY GUIDELINES & RUBRIC

Did you:

- Provide the answer for the number bond that has the triangle using the information given?
- Explain how you got to your answer using the steps you took to answers the preceding number bonds?
It is time to start building your book. Make sure your book has ten or more pages, so that you have plenty of room for your story. Once your book is built, you need to give it a name. Which number do you want to write about? You can choose any number from 10 to 20. Write the title of your book on the cover along with a colorful picture of your number.

Once you have decorated your cover, it is time to begin your book. On the first page, show a way to make the number using a number bond and by writing it in words. For example, if your number was the number nine, you could write "3 and 6 make 9" and draw a number bond showing 3, 6, 9.

**PROJECT PROGRESS**

Take a picture of your cover and your first page.
Upload your pictures.

Supported file formats: PDF, JPG, GIF, PNG, Word

0 / 2 File Limit
Addition Basics - Part 1

Objectives
- Count on and use number bonds to show addition.

Books & Materials
- Math in Focus 1A
- Math in Focus - Teacher Edition
- connecting cubes

Assignments
- Complete Warm-up.
- Read and complete pages in Math in Focus 1A.
- Complete Practice Questions.

LEARN

WARM-UP
Mental Math

1. What number is 1 more than 3?
2. What number is 1 one more than 5?
3. What number is 1 less than 8?
4. What number is 1 less than 6?

TEACHING NOTES
If your student has difficulty visualizing the numbers, model each problem with connecting cubes.

Warm-up Answers:
1. 4
2. 6
3. 7
4. 5

INSTRUCTION
While your Learning Guide reads the poem on p. 39 in Math in Focus 1A, use your fingers to follow along as more and more people get on the bus. Using your fingers is one way to add.
You can also use connecting cubes and number bonds to find the sum of different numbers.

**TEACHING NOTES**

Have your student practice counting on using connecting cubes. Have him start with a number train of 4. Then add one more connecting cube. Ask: How many cubes do you have now? Then have him draw a number bond that represents the amounts. Repeat this activity until your student can create a number bond independently.

**PRACTICE**

Read and complete pp. 39–41 in Math in Focus 1A.

**TEACHING NOTES**

**TEXTBOOK ANSWER KEY**

**WRAP-UP**

You can count on by using number cubes.

You can draw a number bond to show how two parts make a whole.

Seven bees and 2 bees make 9 bees in all.
PRACTICE QUESTIONS

Please go online to view and submit this assessment.
Addition Basics - Part 2

**Objectives**
- Add by counting on.
- Write addition sentences using the symbols + and =.
- Use models to demonstrate mathematical concepts and/or solve problems.

**Books & Materials**
- Math in Focus 1A
- Workbook 1A
- Math in Focus - Teacher Edition
- number cube
- connecting cubes

**Assignments**
- Complete Warm-up.
- Read and complete pages in Math in Focus 1A.
- Complete pages in Workbook 1A.
- Complete Practice Questions.

---

**LEARN**

**WARM-UP**
Roll a number cube. Say the number that is one more than the number rolled on the number cube. Repeat this five times. Use connecting cubes to help you find the answers.

**TEACHING NOTES**

**Warm-up Answer:**
Check your student's work for accuracy.

**INSTRUCTION**

**Counting On from the Greater Number**
When you add, you put numbers together.

**Example 1**
Use 4 connecting cubes to make a number train. Then add 1 more connecting cube. How many do you have now?

![Count on 4, 5.](image)

You have 5 cubes.
You can write an addition sentence to show 4 cubes and 1 more cube.
4 + 1 = 5 ← The plus sign (+) means to add.

Draw a plus sign (+) between the numbers you are adding. Write = and then write the sum, or total.

**Example 2**

What is 3 more than 4?

Place 4 counters of one color in a ten frame.

Add 3 counters of another color. **Count on** to find the total number of counters. Remember to count on from the greater number.

Four is greater than 3. Count on from 4: 4, 5, 6, 7

There are 7 counters in all. Three **more than** 4 is 7. You can write the addition sentence 4 + 3 = 7.

**TEACHING NOTES**

Write an addition sentence and have your student identify the greater number. Then have him count on to find the sum of the two numbers. If he is having difficulty counting on, suggest he join the connecting cubes while completing the **Hands-On Activity**. Then have him start with the last cube of the greater number and count on while using his finger to touch each cube as he is counting.

**PRACTICE**

Read and complete pp. 42–44 (the top of p. 44 only) in Math in Focus 1A. Then complete pp. 41–42 in Workbook 1A.

**TEACHING NOTES**

[Links to Textbook Answer Key and Workbook Answer Key]
Today, you learned about counting on and writing addition sentences. You can add by counting on. Count on from the greater number.

What is 4 more than 5?

Count on from 5: 5, 6, 7, 8, 9.

Four more than 5 is 9. You can write $4 + 5 = 9$.

✔ PRACTICE QUESTIONS

Please go online to view and submit this assessment.
**Addition Basics - Part 3**

<table>
<thead>
<tr>
<th>Objectives</th>
<th>Books &amp; Materials</th>
<th>Assignments</th>
</tr>
</thead>
</table>
| - Add by counting on.  
- Use the term more than when adding.  
- Use models to demonstrate mathematical concepts and/or solve problems. | - Math in Focus 1A  
- Workbook 1A  
- *Math in Focus - Teacher Edition*  
- [connecting cubes](#) | - Complete Warm-up.  
- Read and complete pages in Math in Focus 1A.  
- Complete pages in Workbook 1A.  
- Complete Quick Check. |

### LEARN

**WARM-UP**

Say the answers to the questions.

1. What number is 1 more than 2?
2. What number is 2 more than 2?
3. What number is 3 more than 2?
4. What number is 4 more than 2?

**TEACHING NOTES**

**Warm-up Answers:**

1. 3  
2. 4  
3. 5  
4. 6

**INSTRUCTION**

You can add by counting on.
Example 1

What is 2 more than 3?

Add the two number trains together. **Count on** from 3 as you add each cube.

**Count**: 3, 4, 5.

There are 5 cubes in all. You just added 3 and 2. You started at 3 and **counted on** 2 more.

Three is greater than 2. You added by counting on from the greater number.

Example 2

What is 2 more than 3?

Place 3 counters of one color in a ten frame.

Find 2 more than 3. Place 2 more counters of a different color in the ten frame.

**Count on from** 3:

3, 4, 5

**Two more than** 3 is 5. You can write:

3 + 2 = 5

**TEACHING NOTES**

In the **Learn** section on p. 44, have your student use connecting cubes to recreate the number.

**PRACTICE**

Read and complete pp. 44-48 in *Math in Focus 1A*. Then complete pp. 43-44 in *Workbook 1A*. 
WRAP-UP

You can add by counting on. Count on from the greater number.

What is 4 more than 5?

Count on from 5: 5, 6, 7, 8, 9.

Four more than 5 is 9. You can write $4 + 5 = 9$.

QUICK CHECK

Please go online to view and submit this assessment.

MORE TO EXPLORE

Go to BrainPop Jr. Counting On. Watch the video. Then try the different activities.
Addition Basics - Part 4

Assignments
- Interactive Activity
- Rate Your Understanding

LEARN

INTERACTIVE ACTIVITY

Play Maths Chase to practice adding by counting on.

Choose these settings:

- **Question Type**: Addition
- **Character**: Choose the one you want!
- **Chaser Speed**: Choose how fast another character will be chasing you. If you do not want to be chased, click on No Chaser.

In the white Addition box, start by setting Max X to 9 and Max Y to 9. Then click **Start Game**.

You will see an addition problem. Solve it by starting at the first number and counting on the second number. Type your answer in the box. Keep playing until you have crossed the bridge!

TEACHING NOTES

Help your student establish the appropriate settings. You can also choose whether to play sound, and you can adjust the Max X and Max Y values to provide an appropriate level of challenge. While...
you want to encourage your student to practice the *counting on* strategy, you may wish to talk about other strategies the student could use to find the sum.

✅ RATE YOUR UNDERSTANDING

Please go online to view and submit this assessment.
LEARN

WARM-UP
Look at the two groups of happy faces. Each group of faces is a part.

Copy and fill in the number bond to show how you can join the two parts together to make a whole.

Warm-up Answer:
Three faces and 2 faces make 5 faces.
INSTRUCTION

Today you will learn how to use number bonds to help you add.

Look at the two groups of hearts. Draw a number bond to show how you can join the two groups together to make a whole.

![Number Bond Diagram]

There are 4 hearts in one group.
There are 3 hearts in the other group.
There are 7 hearts in all.
4 and 3 are the parts. 7 is the whole.

Write an addition sentence to show how many hearts there are in all.

\[4 + 3 = 7 \text{ or } 3 + 4 = 7\]

TEACHING NOTES

Your student learned to tell the part-whole relationship in the previous chapter. Guide him to use this information while drawing number bonds. Remind him that there are many ways to draw number bonds. The whole can be on the top or bottom or on either side, as long as the two parts connect to it. Point out to your student that you can add numbers in any order.

PRACTICE

Read and complete pp. 50–51 in Math in Focus 1A. Then complete pp. 47–49 in Workbook 1A.

TEACHING NOTES

TEXTBOOK ANSWER KEY
WORKBOOK ANSWER KEY
WRAP-UP

A number bond is a picture showing a number and its parts. The lesser numbers are the parts. The greatest number is the whole. You can add the parts in a number bond to find the whole.

When adding, 3 and 7 make 10, and 7 and 3 make 10. You can add in any order.

3 + 7 = 10 and 7 + 3 = 10

☑️ PRACTICE QUESTIONS

Please go online to view and submit this assessment.
Addition Basics - Part 6

Objectives
- Explore the Commutative Property of Addition.
- Find the missing number in an equation with three whole numbers.
- Use models to demonstrate mathematical concepts and/or solve problems.

Books & Materials
- Math in Focus 1A
- Workbook 1A
- Math in Focus - Teacher Edition
- counters of different colors
- connecting cubes

 Assignments
- Complete Warm-up.
- Complete pages in Math in Focus 1A.
- Complete pages in Workbook 1A.
- Complete Quick Check.

LEARN

WARM-UP
Add by counting on or drawing a number bond.

1. 3 + 7 = ______
2. 7 + 3 = ______
3. 5 + 1 = ______
4. 1 + 5 = ______
5. 2 + 6 = ______
6. 6 + 2 = ______

TEACHING NOTES
While working, your student should notice that each pair of problems has the same parts and whole but are written in a different order. If he doesn't, remind him that you can add in any order.

Warm-up Answers:

Note: Your student may count on from the greater number or the lesser number.

1. 10; counting on 3: 3, 4, 5, 6, 7, 8, 9, 10
2. 10; counting on 7: 7, 8, 9, 10
3. 6; counting on 5: 5, 6
4. 6; counting on 1: 1, 2, 3, 4, 5, 6
5. 8; counting on 2: 2, 3, 4, 5, 6, 7, 8
6. 8; counting on 6: 6, 7, 8

**INSTRUCTION**

You can use what you know about adding to find the missing number in an addition sentence.

**Example 1:** Look at the following problem.

\[
3 + \underline{\hspace{1cm}} = 10
\]

What can you add to 3 to equal 10? Use your connecting cubes to help you.

Make a number train of 3 cubes of one color. Use a different color to add on 1 cube at a time until you have a total of 10 cubes.

How many different colored cubes did you add to 3 to get a total of 10 cubes?

You added 7 cubes.

\[
3 + 7 = 10
\]

**Example 2:** Look at the next example.

\[
\underline{\hspace{1cm}} + 4 = 9
\]

What can you add to 4 to make 9? Draw a number bond to help you. You can also use connecting cubes.

\[
\text{Five and 4 make 9, so } 5 + 4 = 9.
\]

Write a 5 in the blank circle in your number bond.
Two and 5 make 7, so 2 + 5 = 7.

2 + _______ = 7

You can use connecting cubes, number bonds, or even ten frames to help you find the missing number in an addition sentence.

2 + _____ = 7

Two and 5 make 7, so 2 + 5 = 7.

Please go online to view and submit this assessment.

Review number bonds and different ways to make a number. Use connecting cubes to model the problems. You can use the interactive Ten Frame to practice adding numbers.
When completing the Hands-On Activity, lead your student to see that $8 + 2 = 2 + 8$. If he needs additional practice, choose another addition set for him to model. You can also give him a number and have him figure out the set of numbers that can be added in any order to give the number as an answer. Make sure the sums of the numbers are not greater than 10.

Complete pp. 53–54 in Math in Focus 1A. Then complete pp. 49–51 in Workbook 1A.

TEXTBOOK ANSWER KEY

WORKBOOK ANSWER KEY

You can use connecting cubes, number bonds, or even ten frames to help you find the missing number in an addition sentence.

$2 + \_\_\_\_\_ = 7$

Two and 5 make 7, so $2 + 5 = 7$.

Please go online to view and submit this assessment.

Review number bonds and different ways to make a number. Use connecting cubes to model the problems. You can use the interactive Ten Frame to practice adding numbers.

TEACHING NOTES

Click on the frame icon at the top of the menu on the left and select a ten frame. Instruct your student to drag a certain number of counters into the frame. Then you choose the opposite color and drag a second number of counters into the frame. Have your student click on the Drawing Tools icon at the bottom right and write the corresponding number bond and/or number sentence on the screen. If your student finds this difficult, he or she can dictate it and have you write it on the screen. (Just for fun, your student may want to click on the counter icon at the bottom of the menu on the left to change the color and shape of the counters.)
Addition Basics - Part 7

Objectives
- Tell an addition story for a given picture.
- Write an addition sentence for a given picture.

Books & Materials
- Math in Focus 1A
- Workbook 1A
- Math in Focus - Teacher Edition
- connecting cubes
- Math Journal

Assignments
- Complete Warm-up.
- Read and complete pages in Math in Focus 1A.
- Complete pages in Workbook 1A.
- Complete Math Journal in Math in Focus 1A.
- Complete Practice Questions.

LEARN

WARM-UP
There are many pairs of numbers that make 10.

<table>
<thead>
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<th></th>
<th>+</th>
<th>10</th>
<th>=</th>
<th>10</th>
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<tr>
<td>5</td>
<td></td>
<td></td>
<td>=</td>
<td>10</td>
</tr>
</tbody>
</table>

Find the missing numbers.

TEACHING NOTES

Warm-up Answer:

<table>
<thead>
<tr>
<th></th>
<th>+</th>
<th>10</th>
<th>=</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
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<td>9</td>
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<td>1</td>
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<td></td>
<td>=</td>
<td>10</td>
</tr>
</tbody>
</table>
INSTRUCTION

Today you will learn how to write addition stories.

Look at the picture of the ducks on p. 55 in Math in Focus 1A.

What do you see in the picture?

There are 5 ducks in the pond.

There are 4 ducks next to the pond.

You can use what you see in the picture to write an addition story.

The first sentence of the addition story tells about a part. The second sentence tells about another part.

Draw a number bond to show the two parts. Then write an addition sentence about the story. Finish the story with a sentence that tells about the whole.

TEACHING NOTES

Guide your student to think about stories in the pictures by asking questions such as: What objects do you see in the picture? How many of them in each set? In an addition story, the question that must be answered is usually how many objects are there in all (altogether). Be sure your student shows both the number bond and the addition sentence he will use to solve the problem.

Practice this with him while reading pp. 55-60 in Math in Focus 1A.

PRACTICE

Read and complete pp. 57-60 in Math in Focus 1A. Then complete pp. 53–56 in Workbook 1A.

TEACHING NOTES

TEXTBOOK ANSWER KEY

WORKBOOK ANSWER KEY
WRAP-UP

When you look at a picture, think of an addition story that tells about the people or objects. If there is a family of dogs, you can tell an addition story about the number of adult dogs and the number of puppies.

Write a story about the parts:

The dog family has 2 adult dogs and 2 puppies.

Write an addition sentence:

\[ 2 + 2 = 4 \]

Draw a number bond:

Write a sentence about the whole:

There are 4 dogs in the family.

✔️ PRACTICE QUESTIONS

Please go online to view and submit this assessment.
Addition Basics - Part 8

Objectives

- Write an addition sentence for an everyday situation.
- Solve addition problems related to everyday situations.

Books & Materials

- Math in Focus 1A
- Workbook 1A
- Math in Focus - Teacher Edition
- addition flash cards or index cards with basic facts

Assignments

- Complete Warm-up.
- Read and complete pages in Math in Focus 1A.
- Complete pages in Workbook 1A.
- Complete Practice Questions.

LEARN

WARM-UP

Practice your addition flash cards.

TEACHING NOTES

Create addition fact flash cards with your student. The cards should use math facts adding up to 10 to correspond to the activities completed in previous lesson parts.

Have your student practice basic addition facts for 3 minutes. Drill him with the flash cards by showing one card at a time. Encourage him to answer as quickly as possible. Take a short break and try again. See if your student can solve more facts the second time.

Warm-up Answer:

Check your student's work for accuracy.

INSTRUCTION

In the previous lesson, you learned how to write addition stories. Today you are going to learn how to solve addition stories.

Addition stories tell about a picture or a situation.

There are 2 ducks at the pond. Then 3 more ducks come along.

Addition stories ask a question.

How many ducks are there in all?
Ask yourself: What do I need to find? For this example, you need to find the number of ducks in all.

Write an answer sentence for this problem. Leave a space for the answer.

There are ______ ducks in all.

Now, think about the problem. There are 2 ducks in one set. There are 3 ducks in another set. You know the parts, so you can draw a number bond.

Write a 2 and a 3 for the two parts. Write a question mark for the whole you do not know.

Write an addition sentence to go with the number bond.

2 + 3 = ?

Answer the addition sentence.

2 + 3 = 5

Now, you can fill in your answer sentence.

There are 5 ducks in all.

Have your student write an answer sentence, draw a number bond, write an addition sentence, or fill in the answer sentence for the problems on pp. 61-62 in Math in Focus 1A. Use this time to monitor his understanding of the steps taken to solve word problems. For the Let's Practice section, make sure he writes out the addition sentences for each problem.

Read and complete pp. 61-62 in Math in Focus 1A. Then complete pp. 57-58 in Workbook 1A.

TEXTBOOK ANSWER KEY
WORKBOOK ANSWER KEY
WRAP-UP

You can use addition to solve everyday problems.

A bird is sitting on a wire. Five birds fly over to join it. How many birds are now sitting on the wire?

First write an answer sentence.

_____ birds are sitting on the wire.

Then make a number bond.

Write an addition sentence to solve the problem:

\[ 1 + 5 = 6 \]

Fill in the answer sentence:

**Six** birds are sitting on the wire.

✔ PRACTICE QUESTIONS

Please go online to view and submit this assessment.
Addition Basics - Part 9

Objectives
- Use the guess and check method to solve a problem.
- Use logical deduction to solve a problem.
- Use the words greater than and less than when comparing numbers.
- Determine the truth value of mathematical statement or equation.

Books & Materials
- Math in Focus 1A
- Workbook 1A
- Math in Focus - Teacher Edition
- Index cards (Optional)
- Connecting cubes (Optional)

Assignments
- Complete Warm-up.
- Complete Put on Your Thinking Cap! in Math in Focus 1A.
- Complete pages in Workbook 1A.
- Complete Practice Questions.

LEARN

WARM-UP
1. What is 2 + 8?

2. Use 2, 3, and 5 to write an addition sentence.

3. What are three numbers that are greater than 5?

4. What are three numbers that are less than 5?

TEACHING NOTES

Warm-up Answers:
1. 10
2. 2 + 3 = 5 or 3 + 2 = 5
3. Answers will vary.
4. Answers will vary.

INSTRUCTION

Complete Put on Your Thinking Cap! on p. 63 in Math in Focus 1A.
Read p. 63 in *Math in Focus 1A* together. Ask: What do you need to find? (the placement of the numbers 1, 2, 3, 4, 6, and 7) If your student finds all of the information overwhelming, help make a list of all of the rules on separate paper.

**Rules:**

- The numbers in the green boxes are used only once.
- The numbers in the orange, blue, and purple boxes must be 10 or less than 10.
- The answer in the orange box must be greater than the answer in the blue box.
- The answer in the blue box must be less than the answer in the purple box.

Encourage your student to use the *guess and check* strategy to begin filling in the colored boxes. If he has trouble getting started, show him a sample solution and explain how it follows the rules.

\[
\begin{align*}
1 + 7 &= 8 \\
3 + 4 &= 7 \\
2 + 6 &= 8
\end{align*}
\]

All 6 numbers are used as addends, and each number is used only once. All the sums are less than 10. The first sum, 8, is greater than the second sum, 7. The second sum is less than the third sum, 8. This solution follows all the rules.

**Tip:** Write the numbers 1, 2, 3, 4, 6, and 7 on index cards. Have your student use the cards to act out the problem as he works to find a solution.

Now, encourage your student to find a solution of his own. If he needs help, suggest selecting two cards to act out the solution or choosing two numbers to use the *guess and check* strategy. Have him make the first number sentence. Then have him choose two more numbers and make the second number sentence. If the answer in the first sentence is greater than the second sentence, he can continue to make the third sentence. If not, he can switch the first and second sentences and proceed until he arrives at a solution that follows all the rules.

**PRACTICE**

Complete pp. 59–60 in *Workbook 1A*. 
TEACHING NOTES

Look at p. 59 in Workbook 1A together. Suggest using connecting cubes to model the problem. Have your student make a train of 10 cubes and then break it apart to guess and check different ways Reena and Ivy can divide the prizes. Encourage him to find several answers for this problem.

Look at p. 60 together. Encourage your student to take the time to read all the steps before starting. This will develop good problem-solving habits. He should follow the steps, one at a time, to arrive at the correct solution of 7.

WRAP-UP

- In this lesson, you learned how to find missing parts for an addition sentence by looking at the parts and the whole.
- You learned that some problems can have more than one correct answer.
- You used the guess and check strategy. You know that you need to keep guessing until you find the correct answer.

PRACTICE QUESTIONS

Please go online to view and submit this assessment.
How many pieces of fruit are there in all?

A. Draw a number bond to show the problem.

B. Write an addition sentence for the problem.

\[ \square + \square = \square \]
C. Solve.

There are [ ] pieces of fruit in all.

D. Does the addition sentence 7 + 0 = 7 match the problem? Tell why.

USE FOR MASTERY GUIDELINES & RUBRIC

Did you:

- Use a number bond to show how many pieces of fruit there are in all?
- Write an addition sentence to solve the problem?
- Using your addition sentence did you solve the problem?
- Explain if the addition sentence 7 + 0 = 7 matches the problem?
Now it's time to tell something about your number. Share something that your number enjoys. Use a drawing and addition number sentence. For example, if your number is 9, you can write \( 9 \text{ plays basketball} \). Draw 3 red basketballs and 6 orange basketballs. \( 3 + 6 = 9 \)  

He has 9 basketballs in all.

Please go online to view and submit this assessment.
LEARN

WARM-UP

Which numbers are greater than 2 but less than 7?

![Number Chart]

TEACHING NOTES

If your student has difficulty getting started on the Warm-up, guide her through finding a strategy that will help solve the problem. For example, she may choose to evaluate each number, one at a time, writing down the numbers that meet both requirements. She may also choose to use crayons or colored pencils to circle all the numbers greater than 2 in one color and all those less than 7 in another color, noting which numbers have both.

Ask her to explain her reasoning while solving the problem. Listen to make sure logical thinking is used to arrive at the solution.

Warm-up Answer:

3, 4, 5, 6
INSTRUCTION

You have practiced many strategies to help you solve addition problems. In this chapter, you will learn strategies to help you solve subtraction problems.

When you subtract, you take away a part. You take a part away from the whole and find how many you have left.

You subtract every day. You subtract when you take a bowl out of the cabinet for your breakfast in the morning. You subtract when you eat a handful of crackers.

You are subtracting when you count to see how many items are left.

TEACHING NOTES

Review each of the strategies mentioned in Recall Prior Knowledge with your student. Practice counting by showing her a number of objects and then taking 1 away. Then have her count the remaining objects. You can also have your student draw number bonds that represent different groups. Remind your student that number bonds were used for addition; then tell her that they can also be used for subtraction.

PRACTICE

Read and complete pp. 66-68 in Math in Focus 1A.

WRAP-UP

When you subtract, you take away a part.

You will use what you know about counting to subtract.
You have practiced many strategies to help you solve addition problems. In this chapter, you will learn strategies to help you solve subtraction problems.

When you subtract, you take away a part. You take a part away from the whole and find how many you have left.

You subtract every day. You subtract when you take a bowl out of the cabinet for your breakfast in the morning. You subtract when you eat a handful of crackers. You are subtracting when you count to see how many items are left.

Review each of the strategies mentioned in Recall Prior Knowledge with your student. Practice counting by showing her a number of objects and then taking 1 away. Then have her count the remaining objects. You can also have your student draw number bonds that represent different groups. Remind your student that number bonds were used for addition; then tell her that they can also be used for subtraction.

Read and complete pp. 66-68 in Math in Focus 1A.

TEXTBOOK ANSWER KEY
When you subtract, you take away a part.
You will use what you know about counting to subtract.
Count the balloons.

[Image of balloons]

There are 6 balloons.

You will use what you know about number bonds to subtract.

Five and 1 are the parts. The whole is 6.
Five and 1 make 6.

5
1
6

PRACTICE QUESTIONS
Please go online to view and submit this assessment.
# Subtraction Basics - Part 2

**Objectives**
- Subtract by taking away.

**Books & Materials**
- Math in Focus 1A
- Workbook 1A
- Math in Focus - Teacher Edition
- ten frame
- counters

**Assignments**
- Complete Warm-up.
- Read and complete pages in Math in Focus 1A.
- Complete pages in Workbook 1A.
- Complete Practice Questions.

## LEARN

### WARM-UP

Tell the number.

1. 1 less than 4
2. 1 less than 6
3. 1 less than 5
4. 1 less than 7
5. 1 less than 3
6. 1 less than 1

### TEACHING NOTES

**Warm-up Answers:**

1. 3
2. 5
3. 4
4. 6
5. 2
6. 0
When you **subtract**, you **take away a part**. In this lesson you will learn how to **take away**. Taking away is one way to subtract.

Look at the picture of the bears. Read the subtraction story.

4 bears are on a shelf.  
2 bears fall off.  
How many bears are left?

You already know how to write addition sentences. You can also write subtraction sentences.

Use a minus sign (−) to show subtraction. When you write a subtraction sentence, always start with the whole.

The 4 bears are the whole. The 2 that fall are a part. The 2 that are left are the other part.

$$4 - 2 = 2$$

**Say:** Four minus two equals two.

---

**TEACHING NOTES**

In the **Learn** section on p. 69, read through the example with your student. Have her count the 9 spiders and cross out the 6 spiders in the picture with her finger. Then discuss with her that taking away is a form of subtraction. Have her point out the minus sign in the **subtraction sentence**.

In the **Learn** section on p. 70, make sure that your student understands that when looking for **less than** she will be looking for a smaller number. In order to find a smaller number, she will need to **take away**.

---

**PRACTICE**

Read and complete pp. 69-70 in *Math in Focus 1A*. Then complete pp. 65–67 in *Workbook 1A*.
WRAP-UP

Taking away is one way to subtract.

There are 6 bees.
Three bees go into the hive.
How many bees are left?

Use a minus sign (–) to show subtraction in a number sentence.

\[ 6 - 3 = 3 \]

The minus sign means take away.

You can also subtract to find out how many less. You can say 3 less than 6 is 3, or \( 6 - 3 = 3 \).

There are 3 bees left.

PRACTICE QUESTIONS

Please go online to view and submit this assessment.
Subtraction Basics - Part 3

Assignments
- Interactive Activity
- Rate Your Understanding

LEARN

INTERACTIVE ACTIVITY

You can also think of subtraction as finding the difference.

Open the 20-Bead Rekenrek. Look at the frame. Each row has 10 beads.

Go to the top row. Move 5 beads over to the left side of the frame.

Then go to the bottom row. Move 3 beads over to the left side of the frame.

The group of 5 beads on the top row and the the group of 3 beads on the bottom row are different. How many beads could you take from the top group to make them the same?

You could move 2 beads back over to the right.
Then you would have 3 beads in each group. The difference between 5 and 3 is 2. Write this subtraction sentence on your paper: \(5 - 2 = 3\)

You can subtract to find the difference between two numbers.

Now use the frame to find these differences. Write the subtraction sentences on your paper. When you are finished, have your Learning Guide make some groups of beads on the frame. Then tell the subtraction sentence you would write.

1. the difference between 4 and 1
2. the difference between 7 and 3
3. the difference between 6 and 2
4. the difference between 8 and 5
5. the difference between 9 and 4

---

**TEACHING NOTES**

Guide your student through the activities, asking him to explain his thinking and encouraging him to use the terms "difference" and "subtract." Your student may need to count on the beads one at a time; for example, in the sample shown above, he might count "5... 4... 3" or "5 take away 1, 2 more" as he is removing the beads. As your student becomes more comfortable with the concept of finding the difference, however, encourage him to think in groups, as in "5 take away 2" instead of "5 take away 1 and 1." This will increase his understanding of number and help him become more fluent in performing operations.

If your student seems to grasp the concept easily, ask if there is another way to make the groups the same. He might see that he could add two beads to the bottom row instead. This understanding will pave the way for understanding subtraction as counting on and seeing the relationship between addition and subtraction.

**ANSWER KEY**

1. \(4 - 3 = 1\)
2. \(7 - 4 = 3\)
3. \(6 - 4 = 2\)
4. \(8 - 3 = 5\)
5. \(9 - 5 = 4\)

---

**RATE YOUR UNDERSTANDING**

Please go online to view and submit this assessment.
### Subtraction Basics - Part 4

**Objectives**
- Subtract by counting on.

**Books & Materials**
- Math in Focus 1A
- Workbook 1A
- Math in Focus - Teacher Edition
- 10 connecting cubes
- counting tape

**Assignments**
- Complete Warm-up.
- Read and complete pages in Math in Focus 1A.
- Complete pages in Workbook 1A.
- Complete Quick Check.

### LEARN

### WARM-UP

Find the missing numbers in the patterns.

1. 7, _____, 9
2. 3, _____, 5
3. 6, _____, 8
4. 8, _____, 10
5. 0, _____, _____, 3, 4
6. 5, _____, _____, 8, 9
7. 2, 3, _____, _____, 6
8. 4, 5, _____, 7, _____, 10

### TEACHING NOTES

**Warm-up Answers:**

1. 8
2. 4
3. 7
4. 9
5. 1, 2
6. 6, 7
7. 4, 5
8. 6, 8, 9

**INSTRUCTION**

In the last lesson, you learned to subtract by taking away. In this lesson you will learn another way to subtract. **Counting on** is a good way to solve subtraction problems.

**Example 1**

Read this subtraction story about buttons.

Ann had 6 buttons on her shirt. She lost 2 buttons. How many buttons are left on her shirt?

Find the whole and the part.

Ann started with 6 buttons, so 6 is the whole. She lost 2 buttons. Two is the part.

Use counting tape to count on.

First, find the number on the counting tape that stands for the part. In this problem, 2 is the part.

Put your finger on 2 and **count on** until you reach the whole, 6. Then stop.

How many steps did you take to get from 2 to 6?

You took 4 steps, so $6 - 2 = 4$.

**Ann has 4 buttons left on her shirt.**
Example 2

7 – 3 = ______

Seven is the whole, and 3 is the part. Start with the part. Instead of counting the jumps to get to 7, you will count your fingers. Start with a fist. Each time you count on, put up one finger.

Start with 3. Say 4 and put up a finger.
Say 5 and put up another finger.
Say 6 and put up another finger.
Say 7 and put up another finger.

How many fingers did you put up?

You used 4 fingers, so 7 – 3 = 4.

**TEACHING NOTES**

Practice both methods with your student until she is comfortable with one or both.

Your student may have a tendency to just repeat the numbers on the tape or fingers instead of counting the number of jumps. Ask: How many steps does it take to get to ___?

If you find that your student is having difficulty with counting the first jump when counting on with her fingers, you can have her tap the table with the hand she is counting with while saying the known part. For example, if the problem is 8 – 3, she can take the hand that she will be counting on and hit the table while saying “three,” then put up one finger as she says “four” and so on. She can also touch the number that represents the known part, then count on while touching each number, if your student is using counting tape.

**PRACTICE**

Read and complete pp. 74–75 in *Math in Focus 1A*. Then complete p. 69 in *Workbook 1A*.
**WRAP-UP**

**Counting on** is one way to subtract.

- First find the part.
- Then **count on** using your fingers or counting tape until you stop at the whole.
- The answer is the number of fingers you used or steps you took to reach the whole.

\[
10 - 3 = 7
\]

1 2 3 4 5 6 7 8 9 10

It took 7 steps to reach the whole.

**QUICK CHECK**

Please go online to view and submit this assessment.

**MORE TO EXPLORE**

Have fun watching this video about counting on. Think about how you could show the problems in the video as subtraction.

Please go online to view this video ▶
Subtraction Basics - Part 5

### Objectives
- Subtract by counting back.
- Use models to demonstrate mathematical concepts and/or solve problems.

### Books & Materials
- Math in Focus 1A
- Workbook 1A
- Math in Focus - Teacher Edition
- counting tape

### Assignments
- Complete Warm-up.
- Complete pages in Math in Focus 1A.
- Complete pages in Workbook 1A.
- Complete Practice Questions.

---

**LEARN**

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**WARM-UP**

Find the missing numbers.

1. 10, 9, ______, 7, ______, ______, 4, 3, ______, 1
2. 1 + _____ = 6
3. ______ + 7 = 7
4. 2 + _____ = 9
5. _____ + 4 = 10

---

**TEACHING NOTES**

Warm-up Answers:

1. 8, 6, 5, 2
2. 5
3. 0
4. 7
5. 6
**INSTRUCTION**

In the last lesson part, you learned how to subtract by **counting on**. You start at the part and **count on** until you reach the whole. You count how many steps you take from the part to the whole.

Today you will learn how to subtract by **counting back**. Can you guess what you do when you count back to subtract?

Counting back is the opposite of counting on. Instead of starting with the part, start with the whole. Then count backward until you reach the part. See how many steps it takes to get from the whole to the part.

You can use counting tape or your fingers to help you count back.

**Counting Back with Counting Tape**

Read the following story about spiders.

There are 10 spiders. 
Six crawl away. 
How many are left?

What is the whole?

There are 10 spiders in the whole group, so 10 is the whole.

What is the part?

Six spiders crawl away from the whole group, so 6 is the part.

Using counting tape, start with the whole (10). Count back until you reach the part (6).

How many steps did you take from the whole to the part?

You took 4 steps to get from 10 to 6, so 10 – 6 = 4.

**There are 4 spiders left.**

**Counting Back with Your Fingers**
In the last lesson, you learned how to subtract by counting on. You start at the part and count on until you reach the whole. You count how many steps you take from the part to the whole.

Today you will learn how to subtract by counting back. Can you guess what you do when you count back to subtract?

Counting back is the opposite of counting on. Instead of starting with the part, start with the whole. Then count backward until you reach the part. See how many steps it takes to get from the whole to the part.

You can use counting tape or your fingers to help you count back.

Counting Back with Counting Tape

Read the following story about spiders.

There are 10 spiders.
Six crawl away.
How many are left?

What is the whole?
There are 10 spiders in the whole group, so 10 is the whole.

What is the part?
Six spiders crawl away from the whole group, so 6 is the part.

Using counting tape, start with the whole (10). Count back until you reach the part (6).

How many steps did you take from the whole to the part?
You took 4 steps to get from 10 to 6, so 10 – 6 = 4.

There are 4 spiders left.

Counting Back with Your Fingers

You can also count back with your fingers. Your fingers are the steps you take from the whole to the part.

Solve:

7 – 1 = ______

Count back with your fingers.

Remember to start with the whole when you are counting back. What is the whole? What is the part?

The whole is 7. The part is 1.

Start with the whole, 7, and count back until you reach the part, 1. How many fingers did you use?

Say 6 and put up a finger.
Say 5 and put up a finger.
Say 4 and put up a finger.
Say 3 and put up a finger.
Say 2 and put up a finger.
Say 1 and put up a finger.

You used 6 fingers to get from 7 to 1, so 7 – 1 = 6.

TEACHING NOTES

Explain the difference between counting on and counting back. When counting on, you move forward. When counting back, you move backward. Your student will start with the part and count up to the whole when counting on, but she will start with the whole and count down to the part when counting back. The whole is always greater than the parts. The whole will always be the greater number.

PRACTICE

Read and complete p. 76 in Math in Focus 1A. Then complete p. 70 in Workbook 1A.
Solve:
7 – 1 = _______
Count back with your fingers.
Remember to start with the whole when you are counting back. What is the whole? What is the part?
The whole is 7. The part is 1.
Start with the whole, 7, and count back until you reach the part, 1. How many fingers did you use?
Say 6 and put up a finger.
Say 5 and put up a finger.
Say 4 and put up a finger.
Say 3 and put up a finger.
Say 2 and put up a finger.
Say 1 and put up a finger.
You used 6 fingers to get from 7 to 1, so 7 – 1 = 6.

Explain the difference between counting on and counting back. When counting on, you move forward. When counting back, you move backward. Your student will start with the part and count up to the whole when counting on, but she will start with the whole and count down to the part when counting back. The whole is always greater than the parts. The whole will always be the greater number.

You can count back to subtract using counting tape or your fingers.

When you count back, you always start with the whole. Count back the number of steps it takes to get to the part.

9 – 3 = _______
It takes 6 steps to get from 9 to 3, so 9 – 3 = 6.

Please go online to view and submit this assessment.
Subtraction Basics - Part 6

Objectives
- Subtract by using number bonds (addition/subtraction fact families).
- Find the missing number in an equation with three whole numbers.

Books & Materials
- Math in Focus 1A
- Workbook 1A
- Math in Focus - Teacher Edition

Assignments
- Complete Warm-up.
- Read and complete pages in Math in Focus 1A.
- Complete pages in Workbook 1A.
- Complete Quick Check.

LEARN

WARM-UP

Draw a number bond for each of the following addition problems.

1. \(4 + 3 = \) ______
2. \(3 + 3 = \) ______
3. \(10 + 0 = \) ______
4. \(9 + 1 = \) ______
5. \(1 + 6 = \) ______

TEACHING NOTES

Warm-up Answers:
INSTRUCTION

You can use number bonds to help you solve addition problems. Today you will use number bonds to help you solve subtraction problems.

You can use number bonds to show when a part is taken away.

Draw a number bond with the whole and one part.

There are 5 butterflies.
Two butterflies fly away.
How many are left?

What is the whole?
5 butterflies
<

What is the part?
2 butterflies that fly away

5 – 2 = 3
There are 3 butterflies left.

TEACHING NOTES

In the Learn sections on pp. 77-78, help your student recognize that there are two parts in the pictures. Point to the number that represents the whole in the number bonds and have her explain why that number was used. Do the same thing with the numbers for the parts. If she is having difficulty, discuss the relationship between the parts and the whole with your student. She will continue to practice this skill during subsequent lessons. Guide her through correctly placing the parts and the whole on the number bonds.
There are two kinds of subtraction problems. Some problems talk about parts of a whole. Some problems talk about something that is taken away.

You can use number bonds to help you solve both kinds of subtraction problems.

There are 7 kangaroos. Two kangaroos hop away.
How many kangaroos are left?

There are 5 kangaroos left.
There are two kinds of subtraction problems. Some problems talk about parts of a whole. Some problems talk about something that is taken away.

You can use number bonds to help you solve both kinds of subtraction problems.

There are 7 kangaroos. Two kangaroos hop away.

How many kangaroos are left?

There are 5 kangaroos left.

Complete pp. 75–76 in Workbook 1A.

MORE TO EXPLORE

See how subtraction is used in the video The Number Crew: Taking Away from Ten to Determine Bowling Scores.
Subtraction Basics - Part 7

**Books & Materials**
- [Math in Focus - Teacher Edition](#)

**LEARN**

**INTERACTIVE ACTIVITY**

In this activity you will practice adding and subtracting using a number line.

[Teachley Add & Subtract](#)

**RATE YOUR ENTHUSIASM**

Please go online to view and submit this assessment.
## Subtraction Basics - Part 8

### Objectives
- Tell a subtraction story for a given picture.
- Write a subtraction sentence.

### Books & Materials
- Math in Focus 1A
- Workbook 1A
- Math in Focus - Teacher Edition
- 10 counters (Optional)
- Math Journal

### Assignments
- Complete Warm-up.
- Read and complete pages in Math in Focus 1A.
- Complete pages in Workbook 1A.
- Complete Math Journal in Workbook 1A.
- Complete Practice Questions.

### LEARN

### WARM-UP
Use the number bonds to write subtraction sentences.

1. Use the subtraction sentences to draw number bonds.
   - 4. $9 - 2 = 7$
   - 5. $10 - 5 = 5$

### TEACHING NOTES

**Warm-up Answers:**
1. $5 - 4 = 1$ or $5 - 1 = 4$
2. $8 - 3 = 5$ or $8 - 5 = 3$
3. $10 - 0 = 10$ or $10 - 10 = 0$
You can write addition stories that tell about a picture. Today you will learn how to write a subtraction story.

A subtraction story can tell about part of a group.

You can draw a number bond to go with the story.

You can write a subtraction sentence to go with the story. A subtraction sentence always starts with the whole. You can subtract either part.

You can write $5 - 1 = 4$, or you can write $5 - 4 = 1$.

Both subtraction sentences show a part-whole story.

Have your student look at the picture in the Learn section on p. 79. Tell a subtraction story about the squirrels and hamsters in the picture. Have your student use connecting cubes to represent the animals in the story. Then have her explain how the connecting cubes correlate to the number bond and subtraction sentence.

In the Learn section on p. 80, have your student make up a subtraction story for the picture and explain the relationship between the number bond and subtraction sentence.
Read and complete pp. 79–80 and 82–83 in *Math in Focus 1A*. Then complete pp. 77–80 in *Workbook 1A*.

Complete the Hands-On Activity on p. 81 in *Math in Focus 1A*.

A subtraction story can tell about the parts and the whole. Subtraction stories can also tell about a part being taken away from the whole.

8 bugs are flying.
6 of them are butterflies.
2 of them are bees.

You can draw a number bond and write a subtraction sentence to go with the story.

8 – 6 = 2 or 8 – 2 = 6
Please go online to view and submit this assessment.
Subtraction Basics - Part 9

**Books & Materials**
- Math in Focus - Teacher Edition

**LEARN**

**INTERACTIVE ACTIVITY**
In this lesson, you will draw pictures to solve word problems.

BrainPOP Jr: Draw About It

**RATE YOUR UNDERSTANDING**

Please go online to view and submit this assessment.
Subtraction Basics - Part 10

Objectives
- Solve subtraction problems related to everyday situations.

Books & Materials
- Math in Focus 1A
- Workbook 1A
- Math in Focus - Teacher Edition
- timer or watch with a second hand
- counting tape (Optional)

Assignments
- Complete Warm-up.
- Read and complete pages in Math in Focus 1A.
- Complete pages in Workbook 1A.
- Complete Use For Mastery.

LEARN

WARM-UP

Solve these subtraction facts.

1. $7 - 2 = \boxed{5}$
2. $10 - 6 = \boxed{4}$
3. $8 - 0 = \boxed{8}$
4. $3 - 1 = \boxed{2}$
5. $9 - 4 = \boxed{5}$
6. $6 - \boxed{4} = 2$
7. $4 - \boxed{1} = 3$
8. $5 - \boxed{5} = 0$
9. $\boxed{6} - 5 = 3$
10. $\boxed{7} - 2 = 7$

TEACHING NOTES

Warm-up Answers:

1. 5
2. 4
3. 8
INSTRUCTION

In the previous lesson, you learned how to write a subtraction story. Today you will learn to solve subtraction word problems.

Word problems come from stories.

When solving subtraction word problems, you can subtract by *taking away*, *counting on*, *counting back*, or using a *number bond*.

TEACHING NOTES

If your student is still struggling with the different subtraction strategies, you may want to review them with her before beginning the lesson.

While reading the Learn sections on pp. 84-85, explain to your student that these problems focus on the part-whole concept. Have her look at the two parts of the number bond. Ask: Why is there a question mark in one of the circles? (It represents the other part of the whole, which is unknown.) Have your student relate the problems to *number bonds* and *subtraction sentences*.

PRACTICE

Read and complete pp. 84–86 in *Math in Focus 1A*. Then complete pp. 81–82 in *Workbook 1A*.
In the previous lesson, you learned how to write a subtraction story. Today you will learn to solve subtraction word problems.

Word problems come from stories. When solving subtraction word problems, you can subtract by taking away, counting on, counting back, or using a number bond.

If your student is still struggling with the different subtraction strategies, you may want to review them with her before beginning the lesson.

While reading the Learn sections on pp. 84-85, explain to your student that these problems focus on the part-whole concept. Have her look at the two parts of the number bond. Ask: Why is there a question mark in one of the circles? (It represents the other part of the whole, which is unknown.) Have your student relate the problems to number bonds and subtraction sentences.

Read and complete pp. 84–86 in Math in Focus 1A. Then complete pp. 81–82 in Workbook 1A.

TEXTBOOK ANSWER KEY

Have your student explain the strategies used to solve the problems. Guide her to explore a different strategy for each problem. Comparing two strategies for the same problem will help build her problem-solving skills.

WRAP-UP

A subtraction word problem is a story with a missing part.

Use these steps to solve subtraction word problems.

1. Write an answer sentence.
2. Make a number bond.
3. Write a number sentence and solve.
4. Fill in your answer.

USE FOR MASTERY

Sean buys 8 toy cars.
He gives 5 cars away.
How many toy cars does Sean have left?

A. Write a number sentence for the problem.

\[ \square - \square = ? \]
B. Solve.

Sean has □□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□√
Subtraction Basics - Part 11

SHOW

Tell something else about the number using subtraction. Include a drawing and number sentence. For example, if your number is 9, you can write, "9 likes to eat apples. There are 2 apples in a bag. How many more to have 9? 9 – 2 = 7"

☑️ PROJECT PROGRESS

Please go online to view and submit this assessment.
Relate Addition and Subtraction - Part 1

**Objectives**  
- Identify the relationship between addition and subtraction by writing fact families.  
- Use fact families to solve addition and subtraction problems.

**Books & Materials**  
- Math in Focus 1A  
- Workbook 1A  
- Math in Focus - Teacher Edition  
- connecting cubes

**Assignments**  
- Complete Warm-up.  
- Read and complete pages in Math in Focus 1A.  
- Complete pages in Workbook 1A.  
- Complete Quick Check.

**LEARN**

**WARM-UP**

Use a **number bond** and **connecting cubes** to solve these word problems. Compare the problems. How are they the same? How are they different?

1. There are 5 cheese pizzas at the party.  
   There are 4 pepperoni pizzas at the party.  
   How many pizzas in all?

2. There are 9 presents at the party.  
   Four presents are big.  
   How many are small?

**TEACHING NOTES**

Guide your student to see that both problems use the same number bond to solve. If she struggles, have her compare how she completed each step. Have her use connecting cubes to solve each problem. Point out that, even though the order is different, the same number of cubes are used for each problem.
Warm-up Answers:

1. There are 9 pizzas in all.

2. Five of the presents are small.

Both problems use the same number bond. One problem uses addition, and one uses subtraction.

A **fact family** is a group of addition and subtraction facts that use the same three numbers to make the parts and the whole.

Every number bond has a fact family.

The addition facts and subtraction facts are related. They have the same parts and the same whole. They are a fact family.

Knowing the facts in a fact family can help you solve subtraction problems.

Whenever your student is making a fact family, remind her to always start with the whole first. This will prevent mistakes in writing the facts.
Many times, there is more than one way to solve a problem. Accept any method your student uses to solve the problem that is mathematically reasonable. Ask your student to explain the reason for choosing the sentence and ask her to try to find another way to solve the problem.

**PRACTICE**
Read and complete pp. 87–90 in *Math in Focus 1A*. Then complete pp. 83–84 in *Workbook 1A*.

**TEACHING NOTES**

**TEXTBOOK ANSWER KEY**

**WORKBOOK ANSWER KEY**

**WRAP-UP**

A **fact family** is a group of addition and subtraction facts that have the same parts and the same whole.

\[
\begin{align*}
1 + 3 &= 4 \\
3 + 1 &= 4 \\
4 - 1 &= 3 \\
4 - 3 &= 1
\end{align*}
\]

You can use fact families to help solve addition and subtraction problems.

\[ ? - 2 = 8 \]

\[ 8 + 2 = 10, \text{ so } 10 - 2 = 8 \]

**Looking Forward:** For the next lesson, you will need index cards that have the numbers 0–10 on them, as well as index cards with the symbols +, −, and =. You may also wish to make a copy of the diagrams on pp. 94–95, or your student may write in the textbook.
Quick Check

Please go online to view and submit this assessment.

More to Explore

Watch the video to learn a fun song about fact families.

Please go online to view this video ▶
RELATE ADDITION AND SUBTRACTION - PART 2

LEARN

INTERACTIVE ACTIVITY

Go to Brain Pop Jr. Add and Subtract to Create Fact Families. Watch the video. Then try the other activities.

RATE YOUR UNDERSTANDING

Please go online to view and submit this assessment.
LEARN

WARM-UP
Complete Let’s Explore! on p. 94 in Math in Focus 1A.

TEACHING NOTES
Have your student use the prepared index cards to explore different ways to make number sentences. Each time she writes a correct sentence, have her draw the number bond and related facts. Have her use the guess-and-check strategy while working to find appropriate number sentences.

INSTRUCTION
Turn to Put on Your Thinking Cap! on p. 94 in Math in Focus 1A. Read the problem and solve it.

TEACHING NOTES
Read the directions for Put on Your Thinking Cap! on p. 94 in Math in Focus with your student. Ask: What do you need to find? (the correct location of each of the blue numbers) Say: You will add parts in two different directions to find one whole. Have her point to the number 10 in the orange circle. Trace your finger along both the horizontal and the vertical spaces where your student will place the two sets of parts that equal 10.
Provide your student with a copy of p. 94, or allow her to write in the book. Have her write the numbers 1, 2, 3, 5, 6, 8, and 9 at the top of the page. Say: Look at the number in the orange circle. Lead your student to see that the numbers being added are parts; therefore, the 10 in the orange circle must be the whole.

**Developing a Strategy**

Reiterate that a strategy is a plan to solve a problem. Ask: What would be a good way to solve this problem? Guide your student to see that the *guess and check* strategy is helpful for solving problems with several steps. (Another option is to move the prepared index cards around and use the *act it out* strategy.)

Have your student look at the number 10 in the bottom corner of the grid. Point out the two green circles above and beside the 10. Help her see that, because each set of two circles have a plus sign between them, they must be the parts that make up the whole (10).

Ask: Where would you like to start? If your student is not sure where to begin, suggest looking at the upper right and lower left corners. Since two numbers are being added to equal the corner numbers, the corner numbers cannot be 1 or 2. (None of the other numbers will make this sum.) Since the corner numbers are also wholes, they are probably greater than the other numbers, so 8 and 9 would be good choices to try first.

Wherever your student begins, emphasize that she will use the *guess and check* strategy by trying two numbers and checking to see if they work. If the numbers work, she can move on to a new set. If they do not, she will need to go back and try two other numbers.

*Tip:* The grid will only work if each number is in its correct location. If your student uses a correct equation but puts the numbers in the incorrect circle, do not point this out. As she completes other parts of the grid, she will realize there are mistakes that need to be analyzed. This is an important part of the problem-solving process.

**Solving the Problem**

Have your student choose which direction to go next in the grid. Continue to let your student guess and check. Allow her to work as independently as possible.

Encourage your student to explain her reasoning. Ask: Why did you choose that? or How does that help you?

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**PRACTICE**

Complete the second puzzle grid on p. 95 of *Math in Focus*.

Complete pp. 87–88 in *Workbook*.
1. Before your student begins the second puzzle grid on p. 95, point out that this grid has the same starting number (10) and uses subtraction in some of the number sentences. Explain that 10 is a whole.

Continue to guide and encourage your student throughout the lesson to analyze the parts and the whole and to use her chosen strategy to complete all the practice problems. If your student has difficulty, use guiding questions to help with the next step: What would happen if you tried ___?

2. Your student may want to use the numbered index cards to help solve p. 87 in Workbook. Remind her that fact families share three numbers. She will write two addition and two subtraction sentences for each set of three numbers.

Study the sample riddle together on p. 88. This is an example of the make a list strategy. Have your student read the first two sentences of the riddle at the bottom of the page and stop. Ask: Can you think of two numbers that make 8?

Have your student write all the pairs of numbers that make 8. Read the third clue together. Guide her as she crosses out pairs of numbers that do not equal 6 when subtracted. It is acceptable for your student to use a different strategy to solve the riddle if she can explain her reasoning.

WRAP-UP

Today you learned to look at parts and wholes to find missing numbers. You also practiced using math strategies to solve problems.

USE

USE FOR MASTERY

Is the number sentence true or false? If it is false, tell why it is false and write it correctly.

A. 3 + 3 = 6

  ○ True

  ○ False
Did you:

- Correctly write a number sentence if it is false?

A. $3 + 3 = 6$
  - True
  - False

B. $6 - 2 = 8$
  - True
  - False

C. $7 + 3 = 3 + 7$
  - True
  - False

D. $4 + 1 = 5 + 2$
  - True
  - False
Did you:

- Answer true or false for each number sentence shown?
- Correctly write a number sentence if it is false?
Now it is time to show one of the fact families for your number. For example, if your number is 9, you could write $3 + 6 = 9; \ 6 + 3 = 9; \ 9 - 6 = 3; \ 9 - 3 = 6$.

Please go online to view and submit this assessment.
Addition and Subtraction Strategies - Part 1

**Objectives**
- Add and subtract using number bonds (addition/subtraction fact families).

**Books & Materials**
- Math in Focus 1A
- *Math in Focus - Teacher Edition*
- connecting cubes (Optional)

**Assignments**
- Complete Warm-up.
- Read and complete pages in Math in Focus 1A.
- Complete Practice Questions.

**LEARN**

**WARM-UP**

Fill in the missing number in each number bond. Then write the fact families for each number bond.

1. 0 + 7 = 7, 7 – 0 = 7, 7 - 7 = 0
2. 9 + 1 = 10, 10 – 1 = 9, 10 – 9 = 1
3. 3 + 3 = 6, 6 – 3 = 3, 3 – 3 = 3

**TIP**
Fact families have two addition facts and two subtraction facts.

**TEACHING NOTES**

**Warm-Up Answers:**

1. 7 + 0 = 7, 0 + 7 = 7, 7 – 0 = 7, 7 - 7 = 0
2. 9 + 1 = 10, 1 + 9 = 10, 10 – 1 = 9, 10 – 9 = 1
3. 3 + 3 = 6, 3 + 3 = 6, 6 – 3 = 3, 3 – 3 = 3

**INSTRUCTION**

In this chapter, you will learn more about adding and subtracting.

**Using Number Bonds to Add**

Look at the picture on p. 198 in *Math in Focus 1A*. Make addition and subtraction stories for different things you see in the picture. Then draw a number bond to go with each story.

Notice that there are 6 starfish and 4 crabs. You can make a story about these animals.

There are 4 crabs on the beach.
There are 6 starfish on the beach.

How many starfish and crabs are on the beach altogether?

6 starfish + 4 crabs = 10 animals
6 + 4 = 10

Now use the same animals and number bond to make a subtraction story.

TEACHING NOTES

Review each concept on p. 199 with your student. Then have her complete the Quick Check independently to ensure that she has a full understanding of each concept.

PRACTICE

Read and complete pp. 198-200 in Math in Focus 1A.

TIP
You may use connecting cubes to help you solve the problems on p. 200.

WRAP-UP

You can use strategies for adding and subtracting to solve problems.

You can draw number bonds and use their fact families to help you solve addition and subtraction problems.

4 + 5 = 9
5 + 4 = 9
9 – 5 = 4
9 – 4 = 5

PRACTICE QUESTIONS

Please go online to view and submit this assessment.
Addition and Subtraction Strategies - Part 2

Objectives
- Add by using the strategy of making a ten.
- Use models to demonstrate mathematical concepts and/or solve problems.

Books & Materials
- Math in Focus 1A
- Workbook 1A
- Math in Focus - Teacher Edition
- 2 ten frames
- counters of 2 different colors (Optional)

Assignments
- Complete Warm-up.
- Read and complete pages in Math in Focus 1A.
- Complete pages in Workbook 1A.
- Complete Quick Check.

LEARN

WARM-UP
Look at the following number bonds. All of the wholes are equal to 10. Fill in the missing number for each number bond.

1. 10 - - 4
2. 10 - 9 -
3. 10 - - 10
4. 10 - 4 -
5. 10 - 2 -
6. - 3 -
7. 10 - 7 -
8. - 3 -
9. 10 - 9 -
10. - 2 -
11. 10 - 9 -
12. - 1 -

TEACHING NOTES
Practice basic facts like these often with your student. The more familiar she is with the basic facts, the more fluency she will gain with more complex concepts.

You may find it helpful to view the following video:

Instructional Support Video: Learn How to Use Place Value to Add and Subtract Two-Digit Numbers
Warm-up Answers:

INSTRUCTION

You have used fact families and number bonds to help you solve addition and subtraction problems.

You can also solve problems using the make a ten strategy.

You can use pictures, tens frames, and number bonds to make a ten.

10 + 3 = 13
There are 13 balloons.

10 + 4 = 14
There are 14 counters in all.
PRACTICE
Read and complete pp. 201–203 in *Math in Focus 1A*. Then complete pp. 197–202 in *Workbook 1A*.

TEACHING NOTES

TEXTBOOK ANSWER KEY

WORKBOOK ANSWER KEY

WRAP-UP
You can **make a ten** to help you add.

Make a group of 10. Then add what is left over.

**9 + 6 = ?**

10 + 5 = 15

or

**9 + 6 = 15**

SUPPLEMENTAL

- BrainPOP Jr: Making Ten
Please go online to view and submit this assessment.

If you answered incorrectly, you might have made an error either making a ten or using doubles. Practice by modeling the problem and review addition strategies. You may also want to review Addition and Subtraction Strategies Part 2.
Addition and Subtraction Strategies - Part 3

**Objectives**
- Add by using the strategy of grouping into 10 and ones.

**Books & Materials**
- Math in Focus 1A
- Workbook 1A
- Math in Focus - Teacher Edition
- Connecting cubes of 2 different colors

**Assignments**
- Complete Warm-up.
- Read and complete pages in Math in Focus 1A.
- Complete pages in Workbook 1A.
- Complete Practice Questions.

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**LEARN**

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**WARM-UP**

Mental Math

Use what you know about numbers to solve these problems.

\[
\begin{align*}
7 + 0 & \quad 7 + 1 & \quad 7 + 2 & \quad 7 + 3 & \quad 7 + 4 & \quad 7 + 5 & \quad 7 + 6 & \quad 7 + 7 & \quad 7 + 8 & \quad 7 + 9 & \quad 7 + 10 \\
& \quad 7 + 5 & \quad 4 & \quad 8 & \quad 7 & \quad 5 & \quad 9 & \quad 7 & & \\
& \quad 8 & \quad 9 & \quad 15 & \quad 9 & \quad 4 & \quad 16 & \quad 9 & \quad 17 & \quad 9 \\
& \quad 8 & \quad 9 & \quad 14 & \quad 15 & \quad 14 & \quad 16 & \quad 17 & \quad 14 & \quad 16 \\
\end{align*}
\]

**TEACHING NOTES**

Warm-up Answers:
- 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17
- 8 so 9; 14 so 15; 14 so 16

**INSTRUCTION**

You know you can **make a ten** to help you solve addition problems.

**Grouping into 10 and Ones**

Sometimes the numbers you add will be greater than 10.
Look at the following groups of fish.

What addition sentence can you use to find the total number of fish?

12 + 5 = ______

You can solve this problem by breaking the number 12 into a group of 10 and a group of ones.

Draw a circle around 10 fish.

You just made a group of 10. The fish that are left over are the ones.

How many ones do you have?

You have a group of 2 ones and a group of 5 ones.

5 + 2 = 7

You have 7 ones.

You can add the group of 10 to the 7 ones.

10 + 7 = 17 so 12 + 5 = 17.

Using Connecting Cubes

Try another example: Make a train of 13 connecting cubes. Make another train of 6 connecting cubes using a different color.

How many do you have all together?

First, group the 13 connecting cubes into a group of 10 and a group of 3 ones.

Add the 3 ones to the other 6 cubes.

3 + 6 = 9
What addition sentence can you use to find the total number of fish?

12 + 5 = _______

You can solve this problem by breaking the number 12 into a group of 10 and a group of ones.

Draw a circle around 10 fish.

You just made a group of 10. The fish that are left over are the ones.

How many ones do you have?

You have a group of 2 ones and a group of 5 ones.

5 + 2 = 7

You have 7 ones.

You can add the group of 10 to the 7 ones.

10 + 7 = 17 so 12 + 5 = 17.

Using Connecting Cubes

Try another example: Make a train of 13 connecting cubes. Make another train of 6 connecting cubes using a different color.

How many do you have all together?

First, group the 13 connecting cubes into a group of 10 and a group of 3 ones.

Add the 3 ones to the other 6 cubes.

3 + 6 = 9

Now add the group of 10 to the 9 ones.

10 + 9 = 19, so 13 + 6 = 19.

Using Number Bonds

Look at the picture of flowers.

Sue has 14 roses.

Jake gave her 5 tulips.

How many flowers does Sue have now?

First break apart the number of roses into a group of 10 and ones. Draw a number bond.

Next add all the ones together. You have 4 ones left over from when you made a group of 10, and you have 5 more ones.

4 roses + 5 tulips = 9 flowers

Add the group of 10 to the 9 ones.

9 + 10 = 19, so 14 + 5 = 19 flowers.

Sue has 19 flowers altogether.
You can break a number greater than 10 into a group of 10 and ones to help you add greater numbers. Then you can add the 10 to the ones that are left over.

\[ 5 + 13 = \ \underline{\ \ \ \ \ } \]
\[ 5 \text{ ones} + 3 \text{ ones} = 8 \text{ ones} \]
\[ 10 + 8 = 18, \text{ so } 5 + 13 = 18. \]

Please go online to view and submit this assessment.
Addition and Subtraction Strategies - Part 4

Assignments
- Complete the Interactive Activity.
- Complete Rate Your Understanding.

LEARN

INTERACTIVE ACTIVITY

Go to the interactive Ten Frame to practice adding by making ten.

TEACHING NOTES

Click on the frame icon at the top of the menu on the left and select two ten frames. Then drag some counters from each of the two-color sets onto the screen. (Make sure their sum is not greater than 20.) Have your student click on the Drawing Tools icon at the bottom right and write an addition number sentence for the two sets of counters. (If your student finds this difficult, he can tell you what to write.) Have your student move the counters into the ten frames, filling one of them before putting counters into the second. Write the new number sentence (10 + a number) on the screen. Then write the sum on the screen. Practice for as long as needed for your student to understand the concept of adding by making ten. (Just for fun, your student may want to click on the counter icon at the bottom of the menu on the left to change the color and shape of the counters.)
RATE YOUR UNDERSTANDING

Please go online to view and submit this assessment.
Addition and Subtraction Strategies - Part 5

Objectives
- Add by using the strategy of doubles facts and doubles plus one.
- Use models to demonstrate mathematical concepts and/or solve problems.

Books & Materials
- Math in Focus 1A
- Workbook 1A
- Math in Focus - Teacher Edition
- connecting cubes
- counters (Optional)

Assignments
- Complete Warm-up.
- Read and complete pages in Math in Focus 1A.
- Complete pages in Workbook 1A.
- Complete Practice Questions.

LEARN

WARM-UP

Complete the number bonds.

1. 12
   - 6
   - 6

2. 10
   - 4
   - 4

3. 14
   - 7
   - 7

4. 6
   - 3
   - 3

5. 20
   - 8
   - 8

6. 18
   - 9
   - 9

7. 4
   - 2
   - 2

WARM-UP TEACHING NOTES

Warm-up Answers:
**INSTRUCTION**

Look at the number bonds you just finished. Look at the parts of each number bond. What do you see?

In each number bond, the parts are the same number.

These number bonds show **doubles facts**. In this lesson you will use **double facts** to help you solve addition problems.

**Solving Addition Problems**

Knowing doubles facts can help you solve addition problems.

Knowing doubles facts can also help you use the **doubles plus one** strategy. This helps when you solve addition problems with greater numbers.

You can break apart the 8 into 7 and 1.  
Then you can join the 7 with the other 7 to make a doubles fact.  
Add the doubles and then add 1.  
14 + 1 = 15, so 8 + 7 = 15.

**TEACHING NOTES**

Read the Learn section on p. 206. Help your student recognize that doubling numbers is the same as adding two of the same number. Have her practice different doubles facts up to 5. This will help your student become familiar with them.

For the Learn section on p. 207, have your student use two sets of 2 connecting cubes to represent the double fact. Then add one more cube of a different color. Explain that she does not have to count the cube, but knowing that 2 + 2 = 4 makes it easier for her to figure out 2 + 3, because it is a double plus one.

**PRACTICE**

Read and complete pp. 206–208 in *Math in Focus*. Then complete pp. 205–206 in the *Workbook*.
Read the Learn section on p. 206. Help your student recognize that doubling numbers is the same as adding two of the same number. Have her practice different doubles facts up to 5. This will help your student become familiar with them.

For the Learn section on p. 207, have your student use two sets of 2 connecting cubes to represent the double fact. Then add one more cube of a different color. Explain that she does not have to count the cube, but knowing that 2 + 2 = 4 makes it easier for her to figure out 2 + 3, because it is a double plus one.

Read and complete pp. 206–208 in Math in Focus. Then complete pp. 205–206 in the Workbook.

While completing the activities, have your student use connecting cubes to model the doubles facts, as shown in the book. She may also want to use counters or draw number bonds to model the problems while solving them.

When you add doubles, you add groups of the same size. The fact 5 + 5 = 10 is a doubles fact because you are adding two 5s. The fact 8 + 8 = 16 is a doubles fact because you are adding two 8s.

You can use the doubles plus one strategy to help you solve addition sentences by adding 1 more to a doubles fact.

<table>
<thead>
<tr>
<th>doubles fact</th>
<th>5 + 5 = 10</th>
</tr>
</thead>
<tbody>
<tr>
<td>doubles plus one</td>
<td>5 + 6 = 11</td>
</tr>
</tbody>
</table>

BrainPOP Jr: Basic Adding

Please go online to view and submit this assessment.
Leena has some pencils. She uses up 7 pencils. She has 6 pencils left. How many pencils did she have at first?

**Warm-up Answer:**

7 + 6 = 13; She started with 13 pencils.
In this lesson, you will learn how to decompose numbers into a group of 10 and ones to help you subtract.

**TEACHING NOTES**

The **Learn** section on pp. 209 is showing how to subtract a 1-digit number from a 2-digit number by grouping the 2-digit number into a 10 and ones. Look at the number bond with your student and remind her of the place value of each digit in the 17.

Walk through the steps with her, taking time to explain why addition is being used in Step 3. She may need help understanding that in Step 2 you are only subtracting the 4 from the 7. This still leaves the 10 from the 17 that needs to be added to get the final answer. You may need to use counters or connecting cubes to help your student visualize the steps of this process. Repeat it with different numbers until your student is comfortable with the process because this kind of strategy will be used again in different mathematical operations.

In the **Learn** section on p. 211, have your student examine Step 2. Explain that you cannot take away from a smaller number. Use connecting cubes to demonstrate the concept. Have her divide the 12 cubes into a pile of 10 and a pile of 2. Then say she needs to **take away** 3 from one of the piles. Have her try both piles to help her understand that she cannot take 3 away from 2. Then continue walking through the steps with her.

Guide your student to analyze the problem each time she groups into a ten and ones. Emphasize that she cannot take away something she does not have. For example, she cannot take 5 away from 2. This takes practice. Encourage her to use the **guess and check** strategy while working through the problems.

**PRACTICE**

Read and complete pp. 209-211 in **Math in Focus 1A**. Then complete pp. 209–211 in the **Workbook 1A**.

**TEACHING NOTES**

**TEXTBOOK ANSWER KEY**

**WORKBOOK ANSWER KEY**
You can decompose a number into a ten and ones to subtract.

13 - 6 = ?

First, break apart the whole into a group of 10 and ones.
Next, decide whether to subtract from the 10 or the ones.
Then combine the ones that are left over.

13 - 6 = 7

You can also use a number bond to solve.

Take 6 away from the 10.
You have 4 ones and 3 ones left over. Join them together.
You have 7 ones left, so 13 - 6 = 7.

Quick Check

Please go online to view and submit this assessment.

More to Explore

If you answered incorrectly, you are just one off from the correct difference. Use base-ten blocks to help you check your answer.
Addition and Subtraction Strategies - Part 7

**Objectives**
- Subtract using the strategy of doubles facts.

**Books & Materials**
- Math in Focus 1A
- Workbook 1A
- Math in Focus - Teacher Edition

**Assignments**
- Complete Warm-up.
- Read and complete pages in Math in Focus 1A.
- Complete pages in Workbook 1A.
- Complete Practice Questions.

---

**LEARN**

**WARM-UP**
Group the numbers into a 10 and ones. Then subtract.

1. \(18 - 6 = \)  
2. \(14 - 9 = \)

---

**TEACHING NOTES**

Warm-up Answers:

1. \(18 - 6 = 12\)
2. \(18 - 6 = 12\)
INSTRUCTION

Can you name things on your body that are doubles? You have double 5 fingers and double 5 toes. You also have double 1 ear.

You can use doubles to help you solve addition problems. You can also use doubles to help you solve subtraction problems.

Using Doubles Facts to Subtract

Example: How could you use a doubles fact to solve 12 − 6?

You can use the doubles fact 6 + 6 = 12.

12 − 6 = 6

TEACHING NOTES

Before reading the Learn section on p. 212, you may want to review doubles facts with your student. Then look at the problem 12 − 6 = 6, and assist your student in seeing how to relate using doubles facts in addition to using them in subtraction.

Use the Let's Practice section on p. 214 to help your student analyze problems and determine which strategy is the most helpful each time. Discuss the different ways your student can solve each problem and guide her as she discovers there is more than one way to solve problems.

PRACTICE

Read and complete pp. 212-214 in Math in Focus 1A. Then complete pp. 207-210 in the Workbook 1A.

TEACHING NOTES

TEXTBOOK ANSWER KEY
WORKBOOK ANSWER KEY
WRAP-UP
Doubles facts can help you solve addition and subtraction problems.

- If $1 + 1 = 2$, then $2 - 1 = 1$.
- If $4 + 4 = 8$, then $8 - 4 = 4$.
- If $9 + 9 = 18$, then $18 - 9 = 9$.

You can solve problems with many different strategies.

✔ PRACTICE QUESTIONS

Please go online to view and submit this assessment.
LEARN

Go to Brain Pop Jr. Doubles. Watch the video. Then try the other activities.

USE

You learned different ways to add and subtract.

You learned how to:

- draw a number bond
- use fact families
- make a ten
- make groups of ten
- use doubles facts and doubles plus one
- make tens and ones

Think about these ways as you work this problem.
Find 9 + 8.

Show two ways on a piece of paper. Upload your work.
Now it is time to write a story using doubles fact using your number. You can either double your number or include your number as the sum. For example, if your number is 9 you could write, "9 walks in the park. He sees 9 birds in a tree and 9 birds in the air. He sees 18 birds in all. 9 + 9 = 18" or if your number is 8, you could write "He sees 4 turtles in the water and 4 turtles on the rocks. He sees 8 turtles in all. 4 + 4 = 8"

Tell why this fact family has fewer number facts than others.
Story Problems - Part 1

Objectives
- Write addition and subtraction sentences for everyday situations.
- Solve addition and subtraction problems related to everyday situations.

Books & Materials
- Math in Focus 1A
- Math in Focus - Teacher Edition
- ten frames
- counters
- connecting cubes of 2 different colors
- other counting manipulatives for adding and subtracting

Assignments
- Complete Warm-up.
- Read and complete pages in Math in Focus 1A.
- Complete Quick Check.

LEARN

Warm-up Answers:
1. 10 dots; 2 more
2. 7 dots; 5 more
3. 4 dots; 8 more
4. 6 dots; 6 more
5. 8 dots; 4 more

WARM-UP

Count each set of dots. How many more dots do you need to make 12?

1. 2.
3. 4.
5.

TEACHING NOTES

Warm-up Answers:
1. 10 dots; 2 more
2. 7 dots; 5 more
3. 4 dots; 8 more
4. 6 dots; 6 more
5. 8 dots; 4 more
INSTRUCTION

Look at this word problem about tennis.

Kaya has 4 tennis balls.
She finds 2 tennis balls.
How many tennis balls does she have now?

You can use many strategies to find the number of tennis balls Kaya has now.

Steps to Solving Word Problems

Follow these five steps to solve word problems.

Step 1:
Read and think.
Read the problem and think about what you are trying to find.

You want to know how many tennis balls Kaya has after she finds 2 more.

Step 2:
Write an answer sentence.
Write a sentence that will answer the problem. Leave a blank for the answer.
Kaya has _____ tennis balls now.

Step 3:
Make a model.
Use connecting cubes, counters, ten frames, or number bonds to help you solve the problem.

Step 4:
Write a number sentence, and use a good strategy to solve.
The model will help you write a number sentence for the problem.

4 + 2 = ?
You know 4 plus 2 more is 6.

4 + 2 = 6

Step 5:
Fill in the answer sentence.
Kaya has 6 tennis balls now.
You can use many strategies to find the number of tennis balls Kaya has now.

If you answered incorrectly, use counters and ten frames to model the problem. Review Story Problems.

Follow these steps to solve a word problem.

1. Read and think.
2. Write an answer sentence.
3. Make a model.
4. Write the number sentence and use a good strategy to solve the problem.
5. Fill in the answer sentence.

You want to know how many tennis balls Kaya has after she finds 2 more.

Read the problem and think about what you are trying to find.

Make a model.

Write a sentence that will answer the problem. Leave a blank for the answer.

You know 4 plus 2 more is 6.

4 + 2 = 6

Write a number sentence, and use a good strategy to solve.

Kaya has _____ tennis balls now.

You should go online to view and submit this assessment.

If you answered incorrectly, use counters and ten frames to model the problem. Review Story Problems Part 1.
Story Problems - Part 2

Assignments
- Interactive Activity
- Rate Your Understanding

LEARN

INTERACTIVE ACTIVITY
Go to Singapore Maths: Bar Model Questions to solve word problems with bar models.

INTERACTIVE ACTIVITY

TEACHING NOTES
The game should already be set to “Addition and Subtraction” and “Numbers 1-9.” Click on “Play! Answer the questions!” to bring up the word problems for your student to solve. Guide your student in using the pictured bar models to solve the problems.

RATE YOUR ENTHUSIASM
Please go online to view and submit this assessment.
**Story Problems - Part 3**

**Objectives**
- Draw bar models to solve addition problems related to everyday situations.

**Books & Materials**
- Workbook 1A
- **Math in Focus - Teacher Edition**
- paper
- **counters** or **connecting cubes** (Optional)
- crayons (Optional)

**Assignments**
- Complete Warm-up.
- Complete pages in Workbook 1A.
- Complete Practice Questions.

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**LEARN**

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**WARM-UP**
Solve using **mental math**.

1. \(9 + 9 = 18\) so \(9 + 10 = \) 
2. \(6 + 7 = 13\) so \(6 + 8 = \) 
3. \(5 + 8 = 13\) so \(4 + 8 = \) 
4. \(6 + 2 = 8\) so \(6 + 4 = \) 
5. \(3 + 10 = 13\) so \(3 + 11 = \) 
6. \(6 + 11 = 17\) so \(7 + 11 = \) 
7. \(4 + 12 = 16\) so \(4 + 13 = \) 
8. \(14 + 4 = 18\) so \(14 + 5 = \)

---

**TEACHING NOTES**

Warm-up Answers:

1. 19
2. 14
3. 12
4. 10
5. 14
6. 18
7. 17
8. 19

**INSTRUCTION**

In the last lesson you learned steps that can help you solve word problems. Step 3 says to use a model, but you will not always have models with you when you are solving problems.

Instead, you can draw a model. Today you will learn how to make **bar models** to help you solve addition word problems.

**Bar Models**

A **bar model** is a drawing to help you solve a problem. The bars in bar models are long rectangles that look like number trains.

Here you see 8 connecting cubes.

Instead of drawing 8 cubes, you can draw 1 bar that shows the 8 cubes.

You will draw a line above or below your bar and label the bar with the number it shows.

**Using Bar Models to Solve Addition Problems**

You can use a bar model to solve this addition problem:

\[ 6 + 2 = ? \]

Follow these steps to draw a bar model:

- Draw a bar for the 6 cubes.
- Draw a second bar for the 2 cubes. Make it shorter than the other bar because 2 is less than 6.
- Draw the bars right next to each other so that they touch. This shows they are being added. These are the parts.
- Draw lines to label the parts you already know.
- Label the long bar as 6 and the short bar as 2.
- Draw another line going all the way across the other side of both bars. This line shows the whole.
You do not know the whole yet, so label the long line with a question mark: ? Your bar model should look like this:

What number can you write where you see the question mark? Do you know why?

You will write the number 8 because 6 and 2 make 8.

What number sentence does this bar model show?

\[6 + 2 = 8\]

**Solving a Word Problem**

Try this problem.

Jack has some pencils.
He gives away 7 pencils.
Nine pencils are left.
How many pencils did he start with?

Follow the steps to solve the problem.

**Step 1:** You need to know how many pencils Jack started with.

**Step 2:** Jack started with _______ pencils.

**Step 3:** Draw a bar model.

Jack's pencils are in two parts. He gives away a part, and he has the other part. Draw a bar for each part.

Label the two parts of your bar model. Write a ? mark to show the whole. Then write Jack's pencils next to the bar model to tell what it is about.
Step 4:  
7 + 9 = ?  
Choose a strategy. Solve the addition problem.  
7 + 9 = 16  

Step 5:  Jack started with 16 pencils.  

Your Turn  
Try one more problem on your own. Draw a bar model.  

Carla gives 3 apples to a friend.  
Now she has 9 apples.  
How many apples did she start with?  

Make sure your student labels each part of the bar models. This includes all amounts (numbers) and the question mark. For word problems, she should also label the bar model with a brief description of what it represents. In the example in the Instruction, this label was *Jack's pencils*. To determine this label, have your student ask herself: What is this problem about? What is this model showing?  

Talk to your student about the strategy she chooses to solve the problem about Carla's apples. See if she can identify other possible strategies, or show some that you have found. Make sure she labels all parts. A possible description for the bar model is *Carla's apples*.  

Your Turn Answer:  
3 + 9 = 12. Carla started with 12 apples.  

Complete pp. 211–212 in *Workbook 1A*. Draw and label a bar model for each addition problem. Use number bonds for each problem.  

Your student will likely need help drawing and labeling bar models in this and future lessons. Guide her to understand that the bars do not need to look perfect but do need to be somewhat proportional to the numbers they are representing. For example, a bar for the number 18 should be longer than a bar for the number 9.
**WRAP-UP**

You can draw a bar model to help you solve a problem. Drawing bar models is helpful when you do not have counters or connecting cubes to help you solve a problem.

\[3 + 12 = ?\]

This bar model shows 3 and 12. The shorter bar stands for 3. The longer bar stands for 12.

You add the two bars together to find what the question mark stands for.

\[3 + 12 = 15\]

**TEACHING NOTES**

**Looking Forward:** You may wish to make a copy of the diagram on pp. 220–221 in *Math in Focus*. Your student may also write in the textbook.

**PRACTICE QUESTIONS**

Please go online to view and submit this assessment.
Story Problems - Part 4

### Objectives
- Use the guess and check method to solve a problem.
- Use logical deduction to solve a problem.

### Books & Materials
- Math in Focus 1A
- Workbook 1A
- Math in Focus - Teacher Edition
- Math Journal
- crayons
- copy of pp. 214–215 in Math in Focus 1A (Optional)
- connecting cubes, counters, or ten frames (Optional)
- index cards (Optional)

### Assignments
- Complete Warm-up.
- Complete Put on Your Thinking Cap! in Math in Focus 1A.
- Complete pages in Workbook 1A.
- Complete Use For Mastery.

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### LEARN

#### WARM-UP

Complete Let's Explore on p. 220 of Math in Focus 1A.

#### INSTRUCTION

Today you will use what you have learned in the previous lessons to solve problems.

**Math Journal**

Turn to p. 219 in Math in Focus 1A and look at the pictures of the students. Read the math story the boy is telling.

Open your Math Journal to a new page. Write the date at the top.

Look around the room. Think about the people who are around you. Think about the objects that are near you. Can you think of a math story you can tell?

Write the story in your Math Journal. Use a number bond to help you solve the problem in your story.

Share your math story, and ask your Learning Guide to solve the problem. Talk about different strategies you can use to solve the problem.

**Put on Your Thinking Cap!**

Complete Put on Your Thinking Cap! on pp. 220–221 in Math in Focus 1A.
Math Journal

If your student needs help thinking of an idea for a math story, have her make a list of people and objects around the room.

Put on Your Thinking Cap

Read Put on Your Thinking Cap! on pp. 220–221 in Math in Focus together. Ask: What do you need to find? (the numbers that make up each number sentence in the grid) Explain that your student will add parts in two directions to find a whole. Demonstrate with your finger the two directions in which she will add and how they both will give the same sum.

Provide a copy of the first number grid or allow your student to write in the book. Have her write the numbers in the yellow circles at the top of the page. Ask: Where would be a good place to start? If she is not sure, suggest beginning with the orange circle. Lead her to see that the numbers being added are parts; therefore, the number that goes in the orange circle must be the whole. Since the whole is greater than the parts, the greatest number must go in that circle. Ask her to identify the greatest number (15) and write it on the grid.

Tip: Have your student cross out the numbers at the top of the page as they are used.

Guide your student through the remainder of this problem. If help is needed with the next step, suggest that she look at all the circles and think about what she can find first. Some students find that the number between 8 and 15 and between 9 and 15 are easier to find. Help your student to see that these two circles have a plus sign between them, so they must be the parts of the whole.

Guide your student to use the guess and check strategy as she determines the location of each number. Remind her to check the answers to each problem going in all directions. For example, the number used in the upper left hand corner must make the horizontal and vertical number sentences true.

Guide your student to use similar strategies to solve problem 2. She may choose a different strategy the second time. Have her explain her mathematical reasoning as she completes the problem.

PRACTICE

Complete pp. 219–222 in Workbook 1A.
If your student needs help thinking of an idea for a math story, have her make a list of people and objects around the room.

Put on Your Thinking Cap

Read Put on Your Thinking Cap! on pp. 220–221 in Math in Focus together. Ask: What do you need to find? (the numbers that make up each number sentence in the grid) Explain that your student will add parts in two directions to find a whole. Demonstrate with your finger the two directions in which she will add and how they both will give the same sum.

Provide a copy of the first number grid or allow your student to write in the book. Have her write the numbers in the yellow circles at the top of the page. Ask: Where would be a good place to start? If she is not sure, suggest beginning with the orange circle. Lead her to see that the numbers being added are parts; therefore, the number that goes in the orange circle must be the whole. Since the whole is greater than the parts, the greatest number must go in that circle. Ask her to identify the greatest number (15) and write it on the grid.

Tip: Have your student cross out the numbers at the top of the page as they are used.

Guide your student through the remainder of this problem. If help is needed with the next step, suggest that she look at all the circles and think about what she can find first. Some students find that the number between 8 and 15 and between 9 and 15 are easier to find. Help your student to see that these two circles have a plus sign between them, so they must be the parts of the whole. Guide your student to use the guess and check strategy as she determines the location of each number. Remind her to check the answers to each problem going in all directions. For example, the number used in the upper left hand corner must make the horizontal and vertical number sentences true.

Guide your student to use similar strategies to solve problem 2. She may choose a different strategy the second time. Have her explain her mathematical reasoning as she completes the problem.

Complete pp. 219–222 in Workbook 1A.

Look at p. 219 in Workbook together. Allow your student to complete this page independently if possible. If you notice difficulty, ask: Where is the whole in a subtraction problem? (the first number) Where is the whole in an addition problem? (the last number) She may draw number bonds or use manipulatives if needed.

For the problems on p. 220, your student may benefit from drawing several number bonds for the number 16 before solving the problem. Encourage your student to use manipulatives or number cards through 20 to solve the problems on pp. 221–222. Have her use the guess and check strategy as she works.

WRAP-UP

Today you learned to look at parts and wholes to find missing numbers.

You can use the guess and check strategy to help you solve problems.

USE

USE FOR MASTERY

Tim has 8 balloons.
Amy has 3 more balloons than Tim.

Write the number sentence to show how many balloons Amy has.

\[ \boxed{} \boxed{} \boxed{} = \boxed{} \]

How many balloons does Amy have?

\[ \boxed{} \]
Write the number sentence to show how many balloons they have in all.

\[
\text{ } \quad \text{ } \quad \text{ } \quad \text{ } \quad \text{ } \quad \text{ } \quad \text{ } \quad = \quad \text{ }
\]

How many balloons do they have in all?

Explain how you found how many in all.

<table>
<thead>
<tr>
<th>B</th>
<th>I</th>
<th>U</th>
<th>⬠</th>
<th>⬠</th>
</tr>
</thead>
</table>

USE FOR MASTERY GUIDELINES & RUBRIC

Did you:

- Use the information to write an equation showing how many balloons Amy has?
- Answer the question, "How many balloons does Amy have?"
- Write the equation to show how many balloons they have in all?
- Explain how you found how many balloons there are in all?
Story Problems - Part 5

Books & Materials
- Math in Focus - Teacher Edition

SHOW

Continue your book by telling one or two more stories about your number.

PROJECT PROGRESS

Take a picture of the page or pages that you just wrote.

Upload your picture.

Supported file formats: PDF, JPG, GIF, PNG, Word

0 / 2 File Limit
Now it is time to share your story! Read each page and explain all of the great math stories you wrote about your number.

**FINAL PROJECT**

Scan or take a picture of your book and all the pages. Upload your book.

Supported file formats: PDF, JPG, GIF, PNG, Word

**COLLABORATION**

Share some of the fun adventures that your number had. Share at least one page of your book with your classmates. Then respond to at least 2 classmates.
UNIT QUIZ

Please go online to view and submit this assessment.
Unit 3 – Measure It Up and Record It!
Project: Shadow Clock

PROJECT DESCRIPTION

Way back in time, before there were clocks, people told time by using the sun. Think about how you have used the sun to tell time. Did you ever notice how much brighter the sun is in the middle of the day? In addition to looking up at the sky, people soon learned that they could make a clock using the sun. This is called a **sundial**. Have you ever seen a sundial? What questions do you have about sundials? Ask your Learning Guide your questions as you talk about sundials.

PROJECT DETAILS

In this project, you will make a simple sundial using a stick and the information you learn from the shadow it creates. To complete this project, you will need to:

- Compare the lengths of multiple sticks
- Measure the stick you choose with 2 different units of measure
- Measure the shadow created by the stick
- Write down 4 times on an analog and digital clock
- Organize data using a chart
- Create a graph of your chart
- Share your findings

PROJECT RUBRIC

The [Project Rubric](#) will help you understand how your project will be scored. Your goal should be to earn all 4 points for each part.

RATE YOUR EXCITEMENT

Please go online to view and submit this assessment.

COLLABORATION

Have you ever seen a sundial? If you have, where was it? What did you notice about its shape and design? If you have never seen a real sundial, work with your Learning Guide to read a bit about sundials and share what you have learned. Then respond to at least two classmates.
Comparing Length - Part 1

Objectives
- Compare length/height using words such as taller, shorter, and longer.

Books & Materials
- Math in Focus 1A
- Math in Focus - Teacher Edition

Assignments
- Complete Warm-up.
- Read and complete pages in Math in Focus 1A.
- Complete Practice Questions.

LEARN

WARM-UP

Compare each set of numbers. Use the symbols <, >, and =.

1. 6 \( \bigcirc \) 9
2. 11 \( \bigcirc \) 8
3. 15 \( \bigcirc \) 17
4. 12 \( \bigcirc \) 14
5. 20 \( \bigcirc \) 16

TEACHING NOTES

Warm-up Answers:
1. 6 < 9
2. 11 > 8
3. 15 < 17
4. 12 < 14
5. 20 > 16
INSTRUCTION

You have learned how to compare. To compare means to tell how things are alike and how they are different.

Look at the picture of the bicycle and tricycle. How are they the same? How are they different?

They both have wheels. The bicycle has fewer wheels than the tricycle.

Length

In this chapter, you will learn about length. You will use length to tell how long, tall, or short something is.

People use length every day to compare things. A doctor compares how tall you are now to how tall you were last year. A builder compares pieces of wood to make sure they are the same length. Watch this video to learn more about comparing length.

Please go online to view this video ►

TEACHING NOTES

While reviewing the Counting section in Recall Prior Knowledge, have your student count the connecting cubes, paper clips, and craft sticks. Point out that even though each group has 4 items in it, each group has a different length. This will help your student prepare for measuring with nonstandard units.

If your student has difficulty with comparing the numbers in the second section and recognizing which number is least and which one is greatest, practice the concept again with three different numbers.

Looking Forward

Later in this lesson, your student will be using presentation software, such as PowerPoint or Google Slides, to explore the length of shapes. Take time to locate and become familiar with a presentation program that allows you to create and move shapes.
Later in this lesson, your student will be using presentation software, such as PowerPoint or Google Slides, to explore the length of shapes. Take time to locate and become familiar with a presentation program that allows you to create and move shapes.

Read and complete pp. 224-226 in *Math in Focus 1A*.

You compare to tell how things are the **same** and **different**.

You use special words to compare the length of things.

- Use the words **long** and **short** to compare the length of objects from side to side.
- Use the words **tall** and **short** to compare the length of objects that are up and down.
Comparing Length - Part 2

**Objectives**
- Compare length/height using words such as taller, shorter, and longer.

**Books & Materials**
- Math in Focus 1A
- Workbook 1A
- Math in Focus - Teacher Edition

**Assignments**
- Complete Warm-Up.
- Read and complete pages in Math in Focus 1A.
- Complete pages in Workbook 1A.
- Complete Practice Questions.

**LEARN**

**WARM-UP**
Draw number bonds to solve the problems.

1. $7 + 5 = \underline{\hspace{1cm}}$
2. $9 + \underline{\hspace{1cm}} = 17$
3. $14 - 7 = \underline{\hspace{1cm}}$
4. $\underline{\hspace{1cm}} - 10 = 5$

**TEACHING NOTES**

Warm-up Answers:

![Number bonds for Warm-up problems]
INSTRUCTION

Today you will compare the length of two things. Length tells how long, tall, or short something is.

Tall and Short

You use the words tall and short to talk about up-and-down length. Look at this picture.

Which object is tall?
the tree
Which object is short?
the flower

Tall, Short, and Long

Look at this picture. Which animals are tall? Which animals are long? Which animals are short?

The giraffe and elephant are tall.
The snake is long.
The bird, worm, and mouse are short.

Your Turn

Go on a length hunt. Find sets of objects that are similar (two dolls, two cars, two cats, etc.).

Compare the length of each set of objects using the words you learned today (taller, shorter, longer).
For example: The black cat is taller than the white cat.

Say each comparison in a complete sentence.
Measuring Length: Which Is Shorter?

The word **short** can also tell about the **length** of something.

Look at these pencils.

- **A** short
- **B** shorter

Which pencil is **shorter**?

Pencil B is shorter than pencil A.

Measuring Length: Which Is Longer?

When you talk about length, you can also use the word **longer**.

Look at these trucks.

Which of these trucks is **longer**?

Truck B is longer than truck A.

**TEACHING NOTES**

When discussing comparing lengths with terms, explain that the terms are relative. Give an example using heights of family members. Compare your height to your student’s, but then compare your height to someone taller than you.

You can also practice these different labels by having your student construct number trains to compare their lengths.

**Your Turn Answers:**

Check your student’s work for accuracy.

**PRACTICE**

Read and complete pp. 227–231 in *Math in Focus 1A*. Then complete pp. 225–228 in the *Workbook 1A*. 
WRAP-UP

You can use the words **taller**, **shorter**, and **longer** to compare the length of two objects.

The toothpaste is taller than the can.
The can is shorter than the toothpaste.

The paintbrush is longer than the key.
The key is shorter than the paintbrush.

PRACTICE QUESTIONS

Please go online to view and submit this assessment.
Comparing Length - Part 3

Objectives
- Compare length/height using words such as tallest, shortest, and longest.
- Order three objects according to length.
- Use models to demonstrate mathematical concepts and/or solve problems.

Books & Materials
- Math in Focus 1A
- Workbook 1A
- Math in Focus - Teacher Edition
- connecting cubes of 4 different colors
- scissors
- glue

Assignments
- Complete Warm-Up.
- Read and complete pages in Math in Focus 1A.
- Complete pages in Workbook 1A.
- Complete Quick Check.

LEARN

WARM-UP

Sara builds a train with 6 cubes.
Tim builds a train with 13 cubes.
How much longer is Tim’s train?

Warm-up Answer:
Tim’s train is 7 cubes longer.

TEACHING NOTES

Have your student build the number trains if he has difficulty visualizing the problem. Ask: How many cubes do you need to take away from Tim’s train to make both trains equal? (7 cubes)

Warm-up Answer:
Tim’s train is 7 cubes longer.

INSTRUCTION

Look at the three arrows.

Which arrow is the shortest?

The arrow on the top is the shortest because it is shorter than all the other arrows.
Which arrow is the **longest**?

The arrow on the bottom is the longest because it is longer than all the other arrows.

**Tallest and Shortest**

Look at the three buildings.

Say sentences to compare the buildings. Use the words **tallest** and **shortest**.

The second building is the shortest because it is shorter than all the other buildings.

The third building is the tallest because it is taller than all the other buildings.

---

**TEACHING NOTES**

If your student needs additional practice with comparing three or more objects, have him compare objects in your home. Make sure the correct comparing terms are used; **tall** is used to describe things that are vertical, while **long** refers to things that are horizontal.

---

**PRACTICE**

Read and complete pp. 232–236 in *Math in Focus 1A*. Then complete pp. 229–231 in *Workbook 1A*.

---

**TEACHING NOTES**

- [Textbook Answer Key](#)
- [Workbook Answer Key](#)
WRAP-UP

You can compare the length of three or more things using longest, tallest, and shortest.

![Diagram showing longest and shortest]

Tallest

![Bar graph showing tallest and shortest]

Shortest

QUICK CHECK

Please go online to view and submit this assessment.

MORE TO EXPLORE

If you answered incorrectly, try covering up the yellow parts and slowly move your hand to reveal more of the picture. The picture that keeps going the most is the longest.
Comparing Length - Part 4

**Assignments**
- Complete Interactive Activity.
- Complete Rate Your Understanding.

**LEARN**

Use presentation software to practice comparing length.

**INTERACTIVE ACTIVITY**

Use [presentation software](#) to practice comparing length.

**TEACHING NOTES**

Open your presentation software (such as PowerPoint or Google Slides) and show your student how to click on the shape tools to insert them onto the screen. Allow your student to choose three shapes, changing their size and/or color, if desired. Then ask your student to show you how to compare the length of those shapes. Guide your student to see that the shapes need to be aligned at one end to make the comparison. Continue to practice with several more groups of shapes, having your student tell which is longest and which is shortest in each group.

**RATE YOUR ENTHUSIASM**

Please go online to view and submit this assessment.
Comparing Length - Part 5

**Objectives**
- Compare length/height using words such as tallest, shortest, and longest.
- Use appropriate tools to perform mathematical procedures.

**Books & Materials**
- Math in Focus 1A
- Workbook 1A
- Math in Focus - Teacher Edition
- different household objects that are similar lengths (spoons, socks, etc.)
- 6 strips of paper of different lengths

**Assignments**
- Complete Warm-Up.
- Read and complete pages in *Math in Focus 1A*.
- Complete pages in *Workbook 1A*.
- Complete Quick Check.

---

**LEARN**

**WARM-UP**

Say the missing number in each number bond.

1. 3, 9
2. 13, 8
3. 2, 16
4. 11, 6
5. 15, 14
6. 18, 9
7. 7, 7
8. 10, 9
9. 17, 7
10. 8, 6
11. 0, 12
12. 13

**TEACHING NOTES**

**Warm-up Answers:**

1. 12 2. 5 3. 14 4. 5 5. 1 6. 9 7. 14 8. 1 9. 16 10. 17 11. 14 12. 4

**INSTRUCTION**

You can compare the length of objects. When objects are close to the same length, it may be hard to find the longest or shortest object. Look at the picture.
Since all the cars are close to the same length, it is hard to tell which car is the longest.

You can use a start line to help you compare the cars. Draw a line. Put all the objects next to the line.

Now do you see which car is longest? The car on the top is the longest.

Your Turn

Draw a start line on the side of a piece of paper. Compare the length of three things in your house.

Which is the longest? Which is the shortest? Why is it important to line things up correctly on the start line?

Move the paper so the start line is at the bottom. Use the start line to compare the height of three other things in your house. Which is tallest? Which is shortest?

TEACHING NOTES

Help your student place each item directly next to the start line. Discuss why everything must be right next to the start line. Remind your student to use the word height when he compares objects vertically (up and down), and to use the word length to compare objects horizontally (side by side).

Your Turn Answers:

Check your student's work for accuracy.
PRACTICE
Read and complete pp. 237–239 in Math in Focus 1A. Then complete pp. 225–226 in Workbook 1A.

TEACHING NOTES
Textbook Answer Key
Workbook Answer Key
Give your student six strips of paper of different lengths for Hands-On Activity on p. 238.

Looking Forward: Save the paper strips to use in the next lesson part.

WRAP-UP
You can use a start line when you compare the length of similar sized objects.

It is important to place each object right next to the start line.

You cannot tell which mountain is the tallest if they do not all start at the same point. It looks like mountain B is the tallest.

Now all the mountains are starting from the same point.

You can now see that mountain B is not the tallest. Mountain A is the tallest.

QUICK CHECK
Please go online to view and submit this assessment.
MORE TO EXPLORE

If you chose incorrectly, you might be confused since the start line is at the right instead of the left. Remember to read the bars, starting from the start line, which is at the right. Then review Comparing Length Part 5.
Comparing Length - Part 6

**Assignments**
- Complete Interactive Activity
- Complete Use for Mastery.

**LEARN**

**INTERACTIVE ACTIVITY**

Practice comparing the lengths of different objects. Go to Measurement Games and choose "Order Objects by Length."

**USE**

**USE FOR MASTERY**

Jackie compares a crayon and a pencil to a ribbon. Jackie says the pencil is longer than the crayon.

Is she correct? Tell why you think so.

---

Is she correct? Tell why you think so.

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0 / 10000 Word Limit
USE FOR MASTERY GUIDELINES & RUBRIC

Did you:

- Answer "Yes" or "No" to show whether you agree or disagree with Jackie that the pencil is longer than the crayon?
- Explain why you agree or disagree using the information given to help with your answer?
Comparing Length - Part 7

SHOW

In this task, you will be choosing a stick to use for your shadow clock. Find at least three sticks from around the house, or you can purchase them at a local home goods store. Take a picture of the three sticks together, labeling them as stick A, B, and C. Which stick is the longest? Which is the shortest? Share the picture.

☑️ PROJECT PROGRESS

Please go online to view and submit this assessment.
Measuring Length - Part 1

**LEARN**

**WARM-UP**
Say the missing number in each problem.

1. $5 + _____ = 10$
2. $8 + 8 = _____$
3. $9 + _____ = 18$
4. $_____ + 6 = 12$
5. $7 + _____ = 14$
6. $8 - _____ = 4$
7. $20 - 10 = _____$
8. $6 - 3 = _____$

**TEACHING NOTES**

Warm-up Answers:
1. 5 2. 16 3. 9 4. 6 5. 7 6. 4 7. 10 8. 3

**INSTRUCTION**
In this lesson, you will learn how to measure the length of an object.
Using Counters

Look at this feather.

You can use small objects like counters to measure the length of the feather.

Place the counters in a line next to the feather. Count the counters. How many counters long is the feather?

The feather is about 6 counters long.

Measuring Correctly

When you measure an object with counters, you need to make sure you line up the counters with one end of the object. You can use a start line to show where you are starting to measure.

The start line is at one end of the carrot. Place your first counter at the start line. Then add more counters in a straight line. Make sure all the counters touch and there are no overlaps or gaps between them.

The carrot is about 9 counters long.

Here is the same carrot measured incorrectly. The carrot and counters are not at the start line, and the row of counters has gaps and overlaps. When you measure an object, you want to make sure that anyone else who measures the object gets the same number that you do.

The carrot is NOT 5 counters long.
PRACTICE
Read and complete pp. 240-243 in Math in Focus 1A.

TEACHING NOTES

Textbook Answer Key

While reading the Learn section on p. 240, point out the way the paper clips are lined up and that they are all the same size. Point out the importance of having the same sized items when measuring. The word about is highlighted. Explain to your student that since the tail is not exactly the same length as the paper clips we use the term about.

When working on Hands-On Activity, your student can measure things around the house using craft sticks.

In the Learn section on p. 242, lead your student to see that the number of paper clips will be more than the number of craft sticks when measuring because the paper clips are shorter. Be sure that your student understands that even though the measurements are different, the length of the object remains the same.

WRAP-UP
You can use small items to measure the length of objects.

Line up the items end-to-end next to the object you are measuring.

Count how many items you used to measure. That is how long the object is.

The comb is 6 counters long.

PRACTICE QUESTIONS

Please go online to view and submit this assessment.
LEARN

INTERACTIVE ACTIVITY

Watch the BrainPOP Jr. video, Nonstandard Measurement. Then try some of the activities.

RATE YOUR UNDERSTANDING

Please go online to view and submit this assessment.
Measuring Length - Part 3

**Objectives**
- Measure length using nonstandard units.
- Use appropriate tools to perform mathematical procedures.

**Books & Materials**
- Math in Focus 1A
- Workbook 1A
- Math in Focus - Teacher Edition
- strips of paper
- paper clips

**Assignments**
- Complete Warm-Up.
- Complete pages in *Math in Focus 1A*.
- Complete pages in *Workbook 1A*.
- Complete Practice Questions.

---

**LEARN**

**WARM-UP**

Fill in the missing numbers in these patterns.

1. 10, 12, _______ 16, 18, ______ , _______

2. _______ , 10, 15, ______ , ______ , 30, 35

3. 22, 32, ______ , 52, ______ , ______, 82

**Warm-up Answers:**

1. 14, 20, 22

2. 5, 20, 25

3. 42, 62, 72

---

**TEACHING NOTES**

**Warm-up Answers:**

1. 14, 20, 22

2. 5, 20, 25

3. 42, 62, 72

---

**INSTRUCTION**

You can measure length using small objects such as craft sticks and paper clips. Today you will practice measuring and learn to make good measurement choices.

**Choosing the Correct Tool**

Which is better to measure the length of your room, a penny or a shoe? Why?

**TIP**

Think about the size of your room. It is big compared to a small penny. It would take a lot of pennies and a lot of time to measure your room with pennies.
It is much easier to measure the length of your room with a shoe. Since a penny is so small, it would be hard to count the pennies you used without making a mistake. A shoe is a better measuring tool for your room.

To measure your pencil, which is better to use, a penny or your shoe? Why?

Use a penny. A penny is shorter than a pencil. A shoe is longer than your pencil. A shoe is not a good tool to measure a pencil.

**TEACHING NOTES**

Your student may need help lining up the measurement tools correctly. Allow him to line them up independently; check before he starts counting. Ask: Are the counters right next to each other? Are they overlapping? Did you use a start line?

Pay attention to your student's estimations. If the estimations are not based in mathematical reasoning, guide him by giving him choices or modeling your own estimations. After your student measures each object, discuss his estimate. Ask: Was your guess close to the real number? Why or why not? How could you make a better guess next time?

**PRACTICE**

Read and complete pp. 243–245 in *Math in Focus 1A*. Then complete pp. 237–240 in *Workbook 1A*.

**TEACHING NOTES**

- [Textbook Answer Key](#)
- [Workbook Answer Key](#)

**WRAP-UP**

When you measure an object, make sure your measuring tool is shorter than the object.
Do not use objects that are too small because it is easy to make mistakes.

Do not use objects that are too large because it will not give you a good measurement.

Guess the length before you begin measuring. This helps you check your measurements.

✅ PRACTICE QUESTIONS

Please go online to view and submit this assessment.
Measuring Length - Part 4

Objectives
- Measure length using nonstandard units.
- Use the term unit to refer to a measure of length or width.
- Use appropriate tools to perform mathematical procedures.

Books & Materials
- Math in Focus 1A
- Workbook 1A
- Math in Focus - Teacher Edition
- 20 craft sticks
- 20 paper clips

Assignments
- Complete Warm-up.
- Read and complete pages in Math in Focus 1A.
- Complete pages in Workbook 1A.
- Complete Quick Check.

LEARN

WARM-UP
What is wrong with the way this hot dog was measured? Find the measuring mistakes.

Warm-up Answers:
1. The first paper clip does not begin at the start line.
2. The first and second paper clips overlap.
3. There is a gap between the second and third paper clips.
4. The fourth paper clip is not going in the same direction as the hot dog.

TEACHING NOTES
Your student may struggle to find all four errors. Help by discussing the correct way to line up and count the measuring tools. By looking at incorrect measuring methods, your student will better understand the importance of correct measuring methods.
The word **unit** is a way to describe the length of an object. A craft stick can be 1 unit. A crayon can be 1 unit. An umbrella can be 1 unit.

How many units tall is this ladder?
Measure it with umbrellas.

1 umbrella = 1 unit
The ladder is 8 units tall.

Now, measure the ladder with spoons.

1 spoon = 1 unit

Will you use fewer umbrellas or spoons to measure? Why?
You will use fewer umbrellas.
A spoon is shorter than an umbrella.
This lesson uses the term *unit* to describe length. This skill prepares your student to use standard units of measurement in later grades.

**PRACTICE**
Read and complete pp. 246-252 in *Math in Focus 1A*. Then complete pp. 241-244 in *Workbook 1A*.

**TEACHING NOTES**

Textbook Answer Key

Workbook Answer Key

Your student will use the grid on p. 248 in *Math in Focus 1A* differently than the grid on p. 251. Guide him to see that on p. 248, the tiles on the wall will be used as units to measure different items in the picture. On p. 251, the grid lines will be used to measure each snail’s path, both horizontally and vertically. Have your student trace the path of each snail with his finger, and guide him to count each unit the snail passes.

**WRAP-UP**
You measure objects using units. Any object can be a unit.

- If you measure a shoe with craft sticks, a craft stick is the unit.
- If you measure a shoe with pennies, a penny is the unit.
- If you measure a shoe with keys, a key is the unit.
Please go online to view and submit this assessment.

If you answered incorrectly, use paper to cover the bottom part of the question so only the bottle and row of dimes are shown. Practicing counting the dimes, one by one.
Ben built these trains with his connecting cubes.

1. How many units long is Train D?
2. How many units long is Train A?
3. Which is longer, Train E or Train B?
4. The longest train is 7 units long. Which train is the longest?

Warm-up Answers:
1. 5 units
2. 3 units
3. Train E is longer.
4. Train C is the longest.
Look at these pictures.

Which is longer, the elephant or the dog?

This is not easy to answer. The picture of the dog is longer than the picture of the elephant, but a real elephant is longer than a real dog. How do you know for sure?

You have to compare the dog and the elephant in real life using the same measuring unit. Use a cane.

The real dog is 1 cane long. The real elephant is 6 canes long.

When you use the same unit to measure both animals, you see that the elephant is longer than the dog.

Read **Put on Your Thinking Cap!** on p. 253 in *Math in Focus 1A*. Then answer the questions.
The exercise in the instruction sets the stage to help your student understand that he cannot go by *apparent* size, but that an objective measure must be used when comparing length.

**Put on Your Thinking Cap!**

Look at problem 1 on p. 253 in *Math in Focus 1A* together. By just looking at the picture, your student may think that the book is longer than the loaf of bread because the book is 11 paper clips long and the bread is only 10 erasers long. Or he may think that the bread is longer because it looks longer in the picture. Encourage him to examine the units used to measure the bread and the book.

Ask: What unit is used to measure the bread? (eraser) What unit is used to measure the book? (paper clip). Lead your student to see that, because the units are not the same, it is impossible to tell which item is longer. Ask: What do you need to use to find which item is longer? (the same unit)

Look at problem 2. Ask: What do you need to find? (which set of lines can help measure the leaves) The goal of this problem is to determine that the lines in Set 2 can be used to measure the leaves. Have your student look at the grid lines on p. 252 in *Math in Focus 1A* and pp. 244–248 in the *Workbook 1A*. Remind him that he used the grid lines to measure the items in the pictures. Ask: Which set has lines you can use to measure the leaves? (Set 2) Why? (The lines can be used as units.)

**PRACTICE**

Complete pp. 244–248 in *Workbook 1A*.

**TEACHING NOTES**

**Page 245**

Read p. 245 in the *Workbook 1A* together. Guide your student to choose a strategy he feels will help him solve the problem. He can count the number of units each counter moves and make a list, or he can cut lengths of string for each arrow and line them up. Point out that the counters are not all moving in the same direction.

**Page 246**

Look at problems 5–6 on p. 246. If your student has difficulty counting the units because the beach blanket is on a slant, turn the page so the picture is horizontal. Your student may want to trace the figures to compare them, or he can cut a corresponding length of string for each figure. The same strategy may be used for problem 7, if necessary. (Do not allow the problems to be solved solely by sight. Have your student justify his answers by showing a model or using the written clues.)
Page 247

Discuss a strategy for solving problems 8–9 on p. 247. While it is acceptable to use a string or other manipulative, encourage him to consider using the units at the top of the page. If he does, he should be able to determine that Straw P should also be 6 units long, while Straw X should be longer. For problem 10, remind your student that each block is 1 unit. Bears A and D are lined up next to the units, so they are easy to measure. Guide your student to find the length of Bears B and C by comparing them to the unit blocks next to the bears.

Page 248

Read the problem on p. 248 together. Read all the clues all at once. Guide your student to find a strategy that will help him find the scarf that belongs to each student. Discourage random guessing. He can use deductive reasoning and guess and check his answers.

WRAP-UP

Which is taller, the flower or the house?

The flower looks taller in the picture, but in real life the house is taller. You need to measure each object with the same unit.

USE

USE FOR MASTERY

Look at the picture.
The colored parts show paper strips A, B, C, and D.

Each [square] stands for 1 unit.

Fill in the blanks.

A. Paper strip A is [square] units long.

B. Paper strip C is as long as paper strip [square].

C. Paper strip D is longer than paper strip [square].
d) Which two strips are the same length? How can you tell? Explain.

USE FOR MASTERY GUIDELINES & RUBRIC

Did you:

- Use the information shown to provide an answer to parts A through D?
- Explain why you think the two paper strips you chose for part D are the same length?
Measuring Length - Part 6

SHOW

Choose a stick that you will use for your shadow clock. Choose an item that you can use to measure the stick. Make sure the items you use to measure are all the same length.

☑️ PROJECT PROGRESS

Please go online to view and submit this assessment.
**Time - Part 1**

**Objectives**
- Tell time to the hour.

**Books & Materials**
- Math in Focus 1B
- Workbook 1B
- Math in Focus - Teacher Edition
- analog clock

**Assignments**
- Complete Warm-up.
- Read and complete pages in *Math in Focus 1B*.
- Complete pages in *Workbook 1B*.
- Complete Practice Questions.

---

**LEARN**

**WARM-UP**

Answer the following questions about the days of the week.

1. What day of the week comes after Tuesday?
2. What day comes after Friday?
3. What day comes before Monday?
4. What day comes before Thursday?
5. What day comes after Monday?

---

**TEACHING NOTES**

If your student has difficulty remembering the days of the week in order, allow him to look at a calendar to complete this activity.

**Warm-Up Answers:**

1. Wednesday
2. Saturday
3. Sunday
4. Wednesday
5. Tuesday

---

**INSTRUCTION**

You know that you can use a clock to measure time.
Clocks have pointers called **hands**. The round part of the clock is called the **face**. There are 12 numbers on the face.

The **hour hand** is shorter. It tells you the hour of the day.

The **minute hand** is longer. It tells you the minutes between the hours.

You can remember that the hour hand is shorter than the minute hand because the word **hour** is shorter than the word **minute**.

When the minute hand is pointing at the 12, say **o’clock**.

What time does this analog clock show?

The minute hand is pointing at the 12. The hour hand is pointing at the 11.

The clock shows 11 o’clock.

**Digital Clocks**

Digital clocks do not have hands. They have numbers. The numbers before the colon (:) show the hour. The numbers after the colon show the minutes.

This clock shows 12 o’clock.

When you see two zeros after the colon, say **o’clock**.

**Telling Time**
What time do both of these clocks show?
The clocks both show 10 o’clock.

Look at the next set of clocks. What time do they both show?
Both of the clocks show 8 o’clock.

What time do you wake up in the morning? What time do you eat lunch? What time do you go to bed?
Use your analog clock to show these times.

**TEACHING NOTES**

During this lesson, your student learns the basic concept of telling time to the hour. As he practices showing the time of certain activities during his day, have him show the time using only hours.

**PRACTICE**

Read and complete pp. 164–166 and pp. 168–169 in *Math in Focus 1B*. Then complete pp. 113–118 in *Workbook 1B*.

**TEACHING NOTES**

- Textbook Answer Key
- Workbook Answer Key
WRAP-UP

Clocks measure time.

Both of these clocks show 4 o'clock.

SUPPLEMENTAL

- BrainPOP Jr: Time to the Hour

PRACTICE QUESTIONS

Please go online to view and submit this assessment.
Time - Part 2

Objectives
- Tell time to the half hour.

Books & Materials
- Math in Focus 1B
- Workbook 1B
- *Math in Focus - Teacher Edition*
- analog clock
- Math Journal

Assignments
- Complete Warm-Up.
- Read and complete pages in *Math in Focus 1B*.
- Complete pages in *Workbook 1B*.
- Complete Math Journal in *Workbook 1B*.
- Complete Quick Check.

LEARN

WARM-UP
Show each time on your clock.

1. 4 o'clock
2. 8 o'clock
3. 2 o'clock
4. 11 o'clock
5. 9 o'clock

TEACHING NOTES

Warm-up Answers:
Check your student's work for accuracy.

INSTRUCTION
In this lesson, you will learn to tell time to the half hour.

Look at this clock. It shows the time **half past 1**.
The minute hand is on the 6. It is halfway around the clock.
The hour hand is halfway between 1 and 2.

**Telling Time on the Digital Clock**

You can read times that are half past the hour on a digital clock. Remember, the numbers before the colon show the hour. The numbers after the colon show the minutes.

When you see the number 30 after the colon, it is half past the hour.

Look at these digital clocks. What times do they show?

```
10:30  half past 10
2:30   half past 2
8:30   half past 8
```

**TEACHING NOTES**

Point out to your student that as the minute hand moves around the whole clock, the hour hand moves very slowly from one number to the next. Remind him that half past means the hour has gone past the number you are describing.

Your student may already be comfortable telling time on a digital clock. Instead of saying *half past 6*, he may say *six thirty*. Point out that these are two ways to say the same time. For this lesson, encourage him to use the term *half past*.

**PRACTICE**

Read and complete pp. 170–175 in *Math in Focus 1B*. Then complete pp. 121–127 in *Workbook 1B*. Open your Math Journal to a new page and write the date. Complete the *Math Journal* activity on p. 128 in *Workbook 1B*.

**TEACHING NOTES**

- [Textbook Answer Key](#)
- [Workbook Answer Key](#)
**WRAP-UP**

The following clock shows **half past 3**.

![Analog Clock](image)

The minute hand is halfway around the analog clock. It is on the 6.
The hour hand is halfway between 3 and 4.

This clock also shows **half past 3**.

When you see the number **30**, say **half past**.

---

**QUICK CHECK**

Please go online to view and submit this assessment.

---

**MORE TO EXPLORE**

If you answered incorrectly, practice working with a physical clock setting times that your Learning Guide provides and then have your Learning Guide set times for you to read.
Time - Part 3

Books & Materials
- Math in Focus - Teacher Edition

Assignments
- Complete the Interactive Activity.
- Complete Rate Your Enthusiasm.

LEARN

INTERACTIVE ACTIVITY
Practice telling time on the Interactive Clock with your Learning Guide.

TEACHING NOTES
Take turns with your student showing times to the hour and half hour on the interactive clock.

RATE YOUR ENTHUSIASM
Please go online to view and submit this assessment.
Time - Part 4

LEARN

WARM-UP
Say the days of the week and act out an activity that you do each day.

For example, you can say: On Sunday, I like to play with my dog. (Pretend to pet your dog.) On Monday, I like to play on the swings. (Swing your body back and forth.)

Keep going until you have said and acted out an activity you like to do for each day of the week.

TEACHING NOTES
Warm-up Answers:
Check your student’s responses for accuracy.

INSTRUCTION
In this chapter, you learned about time. Look at the activities in these pictures. What do you see?

You see a girl sleeping. You see a girl eating a hot dog. You see a boy writing a letter.

Some activities take a short amount of time. Some take a longer amount of time. Which of these activities takes the shortest amount of time?

It takes a shorter time to eat a hot dog than to write a letter or sleep all night.
Which activity takes the longest amount of time?

You sleep for many hours at night. Sleeping takes the longest time.

Put these activities in order from shortest to longest.

Eating a hot dog, writing a letter, sleeping all night

Now turn to Put On Your Thinking Cap! on p. 176 in Math in Focus 1B. Read the problems and solve them.

Textbook Answer Key

Problem 1

Read problem 1 on p. 176 in Math in Focus 1B together. Your student may want to model half-past 6 on his analog clock. Guide him as he places the minute hand and the hour hand. Then have him reread and think carefully about the clue at the beginning of the problem. Point out that the clue talks about the time half past 6. It also talks about the placement of the hour hand and the minute hand.

Your student needs to find out if what the girl in the picture is saying is true. Ask: Do both the minute and the hour hand point directly at the 6 when the clock shows half past 6?

Regardless of how your student answers, have him explain his reasoning. Listen to make sure he can explain that the hour hand moves very slowly from one number to the next as the minute hand moves around the whole clock. When the minute hand has gone halfway around the clock (pointing at the 6), the hour hand has moved halfway between two numbers.

Guide him to understand that the girl's statement in the textbook is not correct. If he has difficulty, have him model 6 o'clock on his analog clock. Have him slowly move the minute hand to the 6 as you slowly move the hour hand to halfway between the 6 and 7. Point out the way the hands move on a clock in your workspace, if possible.

Problem 2

Read the second question with your student. Have him break the sentence into parts. The sentence talks about the minute hand, the hour hand, and the time of day that they are on top of each other.

If necessary, allow your student to model this problem with his analog clock. Guide him as he finds that the minute hand and hour hand are on top of each other only at exactly 12 o'clock.
**PRACTICE**

Complete p. 130 in *Workbook 1B*.

---

**TEACHING NOTES**

*Workbook Answer Key*

**Page 130**

Look at p. 130 in the *Workbook 1B* with your student. Point out the series of pictures and clocks. Your student may find it helpful to talk about what happens when someone bakes something, especially if he has not had much experience with cooking. Make sure he can identify the steps in the process before he tries to order them. First have him order the pictures; then have him check that the times on the clocks are in sequential order.

---

**WRAP-UP**

Today you practiced solving problems with clocks.

- You told which activities take a short time and which take a long time.
- You learned that the hour hand moves slowly from one number to the next as the minute hand moves around the whole clock.
- You used pictures of clocks to show the order of events.

---

**USE**

---

**USE FOR MASTERY**

Four friends had dinner at different times last night. The clocks show the times for three of the friends.

![Clocks with times](Image)
A. At what time did Jenny have dinner?


B. Which friend had dinner at 6:00?


C. Laura had dinner at half past 6. Draw the hour and minute hand on the clock or draw a clock yourself.


D. Which friend had dinner last? Tell how you know.


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USE FOR MASTERY GUIDELINES & RUBRIC

Did you:

- Use the information given to answer questions A through D?
- Draw the correct time on the clock in question C?
- Identity the person who ate last and explain how you know?
In this task you are going to measure your shadow clock at different times. Using the same unit, measure the shadow 4 times. Two of your times should be on the hour and the other two on the half hours. Fill in the sheet to show the time on an analog and digital clock as well as the length. If you do not have a printer, you can also copy the clocks onto a piece of paper.
In this task you are going to measure your shadow clock at different times. Using the same unit, measure the shadow 4 times. Two of your times should be on the hour and the other two on the half hours. Fill in the sheet to show the time on an analog and digital clock as well as the length. If you do not have a printer, you can also copy the clocks onto a piece of paper.
Money - Part 1

Objectives
- Identify the penny, nickel, dime, and quarter.
- Determine that a penny equals 1 cent.

Books & Materials
- Math in Focus 1B
- Math in Focus - Teacher Edition
- drawing paper
- pencil
- punch-out coins

Assignments
- Complete Warm-Up.
- Read and complete pages in Math in Focus 1B.
- Complete Practice Questions.

WARM-UP

What numbers are missing from these patterns?

1. 10, _______, _______, 13, _______, 15
2. _______, 15, 20, _______, 30, _______, 40
3. _______, 20, 30, _______, 50, 60, _______

Warm-up Answers:
1. 11; 12; 14
2. 10; 25; 35
3. 10; 40; 70

TEACHING NOTES

INSTRUCTION

Look at the picture on p. 270 in Math in Focus 1B. The girl wants to buy a cat keychain and a pencil. The keychain costs 25 cents, and the pencil costs 10 cents. To find out how many pennies she will need in all, she needs to add.

25 + 10 = 35

She needs 35 cents to buy both items.

In this lesson, you will learn about money.
In this lesson, you will learn about money. You can provide your student with different groups of pennies and have him practice counting by 1s to find the total value. You can also have him pick out pennies from groups of coins to practice identifying them.

Read and complete pp. 270–272 in Math in Focus 1B.

Look at a bunch of coins. What do you notice about them? Can you make a pattern with them? Can you build a tower? Can you sort them into groups? What other ways can you have fun with the coins?

Coins are money. You use money to buy things.

These coins are the penny, the nickel, the dime, and the quarter.

Each coin has a value. The value of the coin is how much it is worth.

Pennies

Count pennies just like numbers. Since 1 penny is worth 1 cent, count groups of pennies by 1s.
You can use pennies to buy things.

The ball costs 10¢.
You need 10 pennies to buy it.

✔️ PRACTICE QUESTIONS

Please go online to view and submit this assessment.
## Money - Part 2

### Objectives
- Determine that a penny equals 1 cent.
- Determine that a nickel equals 5 cents.
- Determine that a dime equals 10 cents.
- Determine the value of a set of coins.

### Books & Materials
- Math in Focus 1B
- Workbook 1B
- Pennies, nickels, and dimes

### Assignments
- Complete Warm-up.
- Read and complete pages in Math in Focus 1B.
- Complete pages in Workbook 1B.
- Complete Practice Questions.

---

### LEARN

### WARM-UP
Add and subtract.

1. \(3 + 9 = \_\_\_\_\_\_\_\_\_\_\)
2. \(9 + 0 = \_\_\_\_\_\_\_\_\_\_\)
3. \(8 + 7 = \_\_\_\_\_\_\_\_\_\_\)
4. \(7 + 1 = \_\_\_\_\_\_\_\_\_\_\)
5. \(6 + 5 = \_\_\_\_\_\_\_\_\_\_\)
6. \(8 + 8 = \_\_\_\_\_\_\_\_\_\_\)
7. \(6 + 7 = \_\_\_\_\_\_\_\_\_\_\)
8. \(4 + 6 = \_\_\_\_\_\_\_\_\_\_\)
9. \(8 + 6 = \_\_\_\_\_\_\_\_\_\_\)
10. \(2 + 5 = \_\_\_\_\_\_\_\_\_\_\)
11. \(14 - 5 = \_\_\_\_\_\_\_\_\_\_\)
12. \(8 - 3 = \_\_\_\_\_\_\_\_\_\_\)
13. \(12 - 7 = \_\_\_\_\_\_\_\_\_\_\)
14. \(10 - 7 = \_\_\_\_\_\_\_\_\_\_\)
15. \(15 - 6 = \_\_\_\_\_\_\_\_\_\_\)
16. \(12 - 6 = \_\_\_\_\_\_\_\_\_\_\)
17. \(17 - 9 = \_\_\_\_\_\_\_\_\_\_\)
18. \(5 - 5 = \_\_\_\_\_\_\_\_\_\_\)
19. \(16 - 8 = \_\_\_\_\_\_\_\_\_\_\)
20. \(4 - 1 = \_\_\_\_\_\_\_\_\_\_\)

---

### TEACHING NOTES
Encourage your student to use mental math to solve each problem. He can write or say the answers.

**Warm-up Answers:**

1. 12
2. 9
3. 15

4. 11. 9
5. 12.5
6. 13.5
Today you will learn more about pennies, nickels, and dimes. Look at your coins.

- Pick out a **penny**. It is the only coin that has a copper color.
- Pick out a **nickel**. A nickel is silver. A nickel is bigger than a penny. The edge of a nickel is smooth.
- Pick out a **dime**. The dime is the smallest coin. It is also silver. The dime has a rough, bumpy edge.

Each coin has 2 faces (sides). Some newer coins have different faces than the older coins.

Each coin has a value. The value of the coin is how much money it is worth.

What is the value of a penny?

1 cent, or 1¢
Do you know the value of a nickel?

5 cents, or 5¢

Do you know the value of a dime?

10 cents, or 10¢

**Counting the Value of Different Coins**

You can find the value of a group of coins that are not all the same.

Start with the coin that has the greatest value. Then use skip counting or count on to find the value of the group of coins.

Start with the nickels. Use your coins or point.

*Count by 5s: 5, 10, 15.*

The value of the 3 nickels is 15 cents.

Count on the pennies.

16, 17, 18

The value of the 3 nickels and the pennies is 18¢

**TEACHING NOTES**

Provide your student with different groups of pennies, dimes, and nickels. Start with sets of dimes and pennies or of nickels and pennies. If your student is comfortable with these groups of coins, have him count sets of dimes and nickels and then dimes, nickels, and pennies. Have him skip count and count on to find the value of the group of coins.

If your student struggles to skip count and count on within the same set of coins, have him stop after he skip counts the coins of greater value. Guide him to write the value of the greater coins on a piece of paper. Then ask which number would come next. He can then begin from that number, counting by 1s.
If your student has difficulty keeping track of the different amounts, he can use another method. Have him line the coins up from greatest to least on a piece of paper, or use a picture of the coins. He will put a mark on each coin that represents 5. So a dime would have 2 marks and a nickel would have 1 mark. Then draw a line to separate the pennies. After the coins are marked, he will count the marks by 5, then pause, and count on with the pennies.

PRACTICE
Read and complete pp. 273–277 in Math in Focus 1B. Then complete pp. 217–220 in Workbook 1B.

TEACHING NOTES
Textbook Answer Key
Workbook Answer Key

WRAP-UP
Pennies, Nickels, and Dimes

A penny is copper-colored. The value of a penny is 1¢.

A nickel is silver-colored. It is bigger than a penny. The value is 5¢.
A dime is also silver-colored. It is the smallest coin. The value is 10¢.

**Counting the Value of Coins**

Count by 1s to find the value of a group of pennies.

Skip count by 5s to find the value of a group of nickels.

Skip count by 10s to find the value of a group of dimes.

**Counting the Value of Different Coins**

You can find the value of a group of different coins.

Skip count to find the value of dimes and nickels. Count on to add the value of the pennies.

✅ **PRACTICE QUESTIONS**

Please go online to view and submit this assessment.
Money - Part 3

Objectives
- Exchange one coin for coins of equal value.

Books & Materials
- Math in Focus 1B
- Workbook 1B
- Math in Focus - Teacher Edition
- pennies, nickels, and dimes

Assignments
- Complete Warm-up.
- Read and complete pages in Math in Focus 1B.
- Complete pages in Workbook 1B.
- Complete Quick Check.

LEARN

WARM-UP
What is the value of each group of coins?

1.

2.

3.

4.

5.
TEACHING NOTES

Warm-up Answers:
1. 6¢
2. 15¢
3. 40¢
4. 23¢
5. 39¢

INSTRUCTION

Exchanging Coins

You can exchange one coin for other coins that have the same value. Exchange means trade.

Look at this picture:

A penny is worth 1¢. The value of 5 pennies is 5¢. A nickel is also worth 5¢.

1 nickel = 5 pennies

You can exchange 1 nickel for 5 pennies because 1 nickel and 5 pennies have the same value.

How much is 1 dime worth? How many pennies are equal to 1 dime?

One dime is worth 10 cents.

10 pennies = 1 dime

You can exchange 10 pennies for 1 dime.
Can you exchange nickels for dimes? How many nickels can you exchange for 1 dime?

Each nickel is worth 5¢.

\[ 5 + 5 = 10 \]

Two nickels have the same value as 1 dime.

**Showing the Same Amount**

You can show the same amount of money using different groups of coins.

Look at the picture of the balloon. How much does the balloon cost? The balloon costs 16¢.

One way to show 16¢ is with pennies. Use your coins to show how many pennies make 16¢.

Each penny is worth 1¢, so 16 pennies is equal to 16¢.
You can exchange some of the pennies for other coins. You know 5 pennies is equal to 5¢. You know a nickel is worth 5¢.

Exchange 5 pennies for one nickel.

Now you have 1 nickel and 11 pennies. Count the coins. You still have 16¢.

You can exchange more of the pennies for nickels. You have 11 pennies. How many nickels can you exchange for 11 pennies? Use your coins.

One nickel is 5¢, and two nickels are 10¢. You can exchange 10 pennies for 2 nickels.

Now you have 3 nickels and 1 penny. Count the coins. Do you still have 16¢?

Can you make 16¢ using a dime as one of the coins? Use your coins to show how you can do this.

You know 2 nickels are worth 10¢. You know 1 dime is worth 10¢. Exchange the 2 nickels for 1 dime.

Now you have 1 dime, 1 nickel, and 1 penny. You still have 16¢.

If an item costs 20¢, you can pay for it with 20 pennies. Count out 20 pennies. What is another way to show 20¢?
Now you have 1 nickel and 11 pennies. Count the coins. You still have 16¢. You can exchange more of the pennies for nickels. You have 11 pennies. How many nickels can you exchange for 11 pennies? Use your coins.

One nickel is 5¢, and two nickels are 10¢. You can exchange 10 pennies for 2 nickels.

Now you have 3 nickels and 1 penny. Count the coins. Do you still have 16¢? Can you make 16¢ using a dime as one of the coins? Use your coins to show how you can do this.

You know 2 nickels are worth 10¢. You know 1 dime is worth 10¢. Exchange the 2 nickels for 1 dime.

Now you have 1 dime, 1 nickel, and 1 penny. You still have 16¢.

If an item costs 20¢, you can pay for it with 20 pennies. Count out 20 pennies. What is another way to show 20¢?

Use your coins to show 20¢ in as many different ways as you can. Then compare your answers to this chart. Did you find the same groups of coins?

PRACTICE
Read and complete pp. 278–282 in Math in Focus 1B. Then complete pp. 221–222 in Workbook 1B.

TEACHING NOTES
Textbook Answer Key
Workbook Answer Key

Have your student model the problems in the textbook and workbook with his coins.

WRAP-UP
You can exchange a group of coins for a coin that has the same value. You can exchange 5 pennies for 1 nickel because 5 pennies and 1 nickel both have a value of 5¢.
You can show an amount of money in more than one way by using different groups of coins.

![Diagram of coins]

You can exchange a group of coins for a coin that has the same value. You can exchange 5 pennies for 1 nickel because 5 pennies and 1 nickel both have a value of 5¢.

You can show an amount of money in more than one way by using different groups of coins.

### SUPPLEMENTAL

- BrainPOP Jr: Counting Coins

### QUICK CHECK

Please go online to view and submit this assessment.

### MORE TO EXPLORE

If you struggled with this question, you will need more practice with exchanging coins and their values. Remember that two nickels can be traded for one dime.
Money - Part 4

Objectives
- Determine that a quarter equals 25 cents.
- Exchange one coin for coins of equal value.

Books & Materials
- Math in Focus 1B
- Workbook 1B
- Math in Focus - Teacher Edition
- crayons
- drawing paper
- coins

Assignments
- Complete Warm-Up.
- Read and complete pages in Math in Focus 1B.
- Complete pages in Workbook 1B.
- Complete Use For Mastery.

LEARN

WARM-UP
Use your coins to show these amounts. Try to use the fewest coins possible.

1. 22¢
2. 8¢
3. 46¢

TEACHING NOTES

Warm-up Answers:
INSTRUCTION

Can you name this coin?

This is a **quarter**. It is silver-colored, just like the nickel and dime. It is larger than the nickel, dime, and penny.

**The value of 1 quarter is 25¢.**

You can exchange groups of coins for a quarter.

---

TEACHING NOTES

Work with your student and have him exchange different combinations of coins to represent a quarter. If he is having difficulty, have him start with 2 dimes and 1 nickel. Have him exchange different coin combinations for one of the dimes or nickel. Then have him look at the entire group of coins and make the connection between the change in the one coin and how that changes the combination of all the coins that represent 25 (cents).

If your student has difficulty identifying coins, have him compare and contrast the different coins. You can have him find or draw pictures of coins and make a chart, showing a picture of each coin, its name, and its value.

---

PRACTICE

Read and complete pp. 283–285 in *Math in Focus 1B*. Then complete pp. 217–220 in *Workbook 1B*.

---

TEACHING NOTES

[Textbook Answer Key](#)

[Workbook Answer Key](#)
ENRICHMENT
Quarters are fun to investigate because they have many different faces. Collect as many quarters as you can and compare them.

Look at the different states and state parks on the coins. See if you can find a coin from the state that you live in or have visited.

WRAP-UP
A quarter has a value of 25¢.

You can exchange a group of coins that have a value of 25¢ for 1 quarter.

= 25¢

USE

USE FOR MASTERY

Alex buys a muffin with the coins shown.

A. How much does the muffin cost?

The muffin costs ___¢.
B. How many pennies would have the same value?

pennies

C. How many quarters would have the same value?

quarters

D. Can Alex trade two dimes for a nickel? Explain.

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**USE FOR MASTERY GUIDELINES & RUBRIC**

Did you:

- Identify how much the muffins cost?
- Show how many pennies it would take to make the same amount?
- Show how many quarters it would take to make the same amount?
- Answer if Alex could trade two dimes for a nickel and explain why or why not?
Money - Part 5

**Books & Materials**
- Math in Focus - Teacher Edition

**LEARN**

**INTERACTIVE ACTIVITY**

In this video, you will learn about the relationship between dollars and cents.

- BrainPOP Jr: Dollars and Cents

In these activities, you will practice and show your understanding of how dollars and cents relate.

- Dollars and Cents Quiz
- Dollars and Cents Game

**RATE YOUR UNDERSTANDING**

Please go online to view and submit this assessment.
Use the clues and the numbers in the box to find the mystery number.

1. The mystery number is not the greatest number. Cross out the greatest number.
2. It is greater than 7. Circle all numbers greater than 7. Cross out all numbers less than 7.
3. It is less than 14. Cross out all numbers greater than 14.
4. Look at the numbers that are not crossed out. Draw a square around the least number.
5. Add 4 to the number in the square.

The mystery number is _______.

Guide your student through the clues and instructions as he works to find the missing number.

Warm-up Answer:
The mystery number is 12.
**INSTRUCTION**

In this chapter, you will read, understand, and show information with numbers in different ways.

Look at the picture on p. 27 in *Math in Focus 1B*. How many ducks are in the picture?

You can answer that question in more than one way. You can hold up 8 fingers, or say the word *eight*.

You can spell out the word *eight* or write it down. You can also count out 8 connecting cubes or draw a picture of 8 ducks. These are different ways to show the number 8.

**TEACHING NOTES**

In this lesson, your student will use what he knows about counting items in a collection of objects to represent the data. Categorizing and counting the collection is the first step in using a collection to read, create, and interpret graphs.

**PRACTICE**

Read and complete pp. 27–29 in *Math in Focus 1B*.

**WRAP-UP**

You can show information in different ways. You can count each type of object in a set and show that information with numbers.

- There are 4 bananas.
- There are 3 apples.
- There is 1 orange.

**PRACTICE QUESTIONS**

Please go online to view and submit this assessment.
### Charts and Graphs - Part 2

**Objectives**
- Read a picture graph.

**Books & Materials**
- Math in Focus 1B
- Workbook 1B
- *Math in Focus - Teacher Edition*
- scissors (Optional)
- red, yellow, blue paper (Optional)

**Assignments**
- Complete Warm-up.
- Read and complete pages *Math in Focus 1B*.
- Complete pages in *Workbook 1B*.
- Complete Practice Questions.

### LEARN

#### WARM-UP

Draw number bonds that have a sum of 10. How many number bonds can you make?

#### TEACHING NOTES

Remind your student that a sum of 10 means that 10 is the whole. To make the number bonds, find two parts that will equal the whole.

**Warm-up Answers:**

![Number bonds diagram](image)
**INSTRUCTION**

**Data** is information that shows numbers.

On p. 30 in *Math in Focus 1B* you see that there are a lot of ribbons. The **data** that you could get from the picture are how many ribbons there are of each color. It is not that easy to see how many ribbons there are of each color. But you can show the data on a **picture graph**, like the one on p. 31, to make the information easier to see. A **picture graph** is a way to show data using pictures.

**TEACHING NOTES**

*This is your student's first formal introduction to picture graphs and the basic data they represent. Guide your student as he reads the graphs and studies the data. Ask questions such as: Can you tell if there are more ______ or ______? Can you tell if there are less ______ or ______? This will further his understanding of reading and interpreting the data.*

If your student has difficulty understanding the correlation between the ribbons on p. 30 and the picture graph on p. 31, you can cut 4 yellow, 5 red, and 7 blue pieces of paper. Then mix them together. Have your student sort them by color and put them in a row. Then discuss how the rows of paper pieces look like the picture graph.

**PRACTICE**

Read and complete pp. 30–35 in *Math in Focus 1B*. Then complete pp. 25–28 in *Workbook 1B*.

**WRAP-UP**

Data is information that shows numbers. A **picture graph** is a way to show data using pictures.

<table>
<thead>
<tr>
<th>In the Garden</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ladybugs</td>
</tr>
</tbody>
</table>

There are 2 ladybugs.
There are 5 mosquitoes.
There is 1 butterfly.
You can compare data on a picture graph. **Most** means the greatest number of things. **Fewest** means the least number of things.

The most insects in the garden are mosquitoes. The fewest insects in the garden are butterflies.

![PRACTICE QUESTIONS](image)

Please go online to view and submit this assessment.

![TEACHING NOTES](image)

- [Textbook Answer Key](#)
- [Workbook Answer Key](#)
Charts and Graphs - Part 3

**Objectives**
- Create a picture graph.

**Books & Materials**
- Math in Focus 1B
- Workbook 1B
- Math in Focus - Teacher Edition
- 4 connecting cubes each of 4 different colors
- paper lunch bag
- number cube

**Assignments**
- Complete Warm-Up.
- Read and complete pages Math in Focus 1B.
- Complete pages Workbook 1B.
- Complete Practice Questions.

**LEARN**

**WARM-UP**

Use the picture graph to answer the questions. Write the answers on separate paper.

<table>
<thead>
<tr>
<th>Insect</th>
<th>Number of Insects Seen</th>
</tr>
</thead>
<tbody>
<tr>
<td>Butterflies</td>
<td><img src="image" alt="Butterfly" /></td>
</tr>
<tr>
<td>Ants</td>
<td><img src="image" alt="Ants" /></td>
</tr>
<tr>
<td>Ladybugs</td>
<td><img src="image" alt="Ladybugs" /></td>
</tr>
</tbody>
</table>

1. Which insect did students see most often?
2. How many ants did students see?
3. Did the students see fewer ladybugs or butterflies? How many fewer?

**Warm-up Answers:**
1. ant
2. 4
3. butterfly; 2
INSTRUCTION

You learned to read a picture graph. Today you will learn to make a picture graph.

Making a Picture Graph

Copy Adam’s picture graph from p. 36 in Math in Focus 1B. Make sure you record his first two rolls, a 3 and a 4. Then use a number cube and roll it 10 more times. Be sure to draw a star for each roll. When you are finished, you will have made a picture graph.

TEACHING NOTES

Your student may need help drawing the framework for a picture graph. When creating the picture graph for the activity on p. 36 in Math in Focus 1B, you may want to have your student pick a different shape if he struggles with drawing stars. Have him use circles or squares so he can focus on collecting data instead of drawing the shape.

When your student creates the picture graph of the fruit in the Your Turn section, encourage him to select easy shapes to draw to represent the different fruits. Do not have him use lines to represent items in a picture graph because that can cause confusion when your student learns about tally charts.

PRACTICE

Read and complete pp. 36–37 in Math in Focus 1B. Then complete pp. 29–31 in Workbook.

TEACHING NOTES

Textbook Answer Key

Workbook Answer Key
WRAP-UP

You can make a picture graph to show a collection of data. You organize the data by counting groups of objects that are the same. Record the data using a symbol.

![Art Supplies](image)

Each + stands for 1 art supply.

SUPPLEMENTAL

- BrainPOP Jr: Pictographs

PRACTICE QUESTIONS

Please go online to view and submit this assessment.
Charts and Graphs - Part 4

Objectives
- Read a picture graph.

Books & Materials
- Math in Focus 1B
- Workbook 1B
- Math in Focus - Teacher Edition

Assignments
- Complete Warm-Up.
- Read and complete pages in Math in Focus 1B.
- Complete pages in Workbook 1B.
- Complete Quick Check.

LEARN

WARM-UP

Solve each addition problem. Is the sum greater than, less than, or equal to 12? Write the answers using the symbols >, <, or = on separate paper.

1. 5 + 2 + 3 = _____ 12
2. 6 + 6 + 1 = _____ 12
3. 3 + 7 + 9 = _____ 12
4. 4 + 2 + 2 = _____ 12
5. 7 + 1 + 4 = _____ 12
A picture graph shows a collection of data. There are other parts on the graph that help explain what the data means. You can use this information to compare data in the graph.

The title of a picture graph is important because it tells you what the graph is showing. What is the graph showing on p. 38 in *Math in Focus 1B*?

**It is a graph showing favorite toys.**

At the bottom of the picture graph you will see a line that reads each ★ stands for 1 child. This is called the key. The key lets you know what the pictures represent. A picture graph also needs a list of categories. In this graph the names of the different toys are the categories.

When working with each picture graph, make sure your student is able to find the title, key, list of categories, and the data. Point out to your student that some graphs are horizontal while others are vertical. Both graphs show the same data, just in different ways. Practice reading both types of graphs with your student.

Read and complete pp. 38–41 in *Math in Focus 1B*. Then complete pp. 32–34 in *Workbook 1B*. 
WRAP-UP

Every picture graph has important parts. Use these parts to help you understand the data in the graph.

Quick Check

Please go online to view and submit this assessment.

More to Explore

If you had difficulty with this question, practice by printing and cross out tigers as you count. You can also use different color counters/blocks to model the picture and then move counters as you count.
Charts and Graphs - Part 5

Objectives
- Make a tally chart.
- Make a bar graph.
- Read a bar graph.

Books & Materials
- Math in Focus 1B
- Workbook 1B
- Math in Focus - Teacher Edition

Assignments
- Complete Warm-Up.
- Read and complete pages in Math in Focus 1B.
- Complete pages in Workbook 1B.
- Complete Quick Check.

LEARN

WARM-UP
Write the fact family for each number bond on separate paper.

1. 7 + 5 = 12; 5 + 7 = 12; 12 – 5 = 7; 12 – 7 = 5
2. 6 + 9 = 15; 9 + 6 = 15; 15 – 6 = 9; 15 – 9 = 6
3. 3 + 8 = 11; 8 + 3 = 11; 11 – 3 = 8; 11 – 8 = 3
4. 10 + 9 = 19; 9 + 10 = 19; 19 – 10 = 9; 19 – 9 = 10
5. 7 + 7 = 14; 14 – 7 = 7

TEACHING NOTES

Warm-up Answers:
1. 7 + 5 = 12; 5 + 7 = 12; 12 – 5 = 7; 12 – 7 = 5
2. 6 + 9 = 15; 9 + 6 = 15; 15 – 6 = 9; 15 – 9 = 6
3. 3 + 8 = 11; 8 + 3 = 11; 11 – 3 = 8; 11 – 8 = 3
4. 10 + 9 = 19; 9 + 10 = 19; 19 – 10 = 9; 19 – 9 = 10
5. 7 + 7 = 14; 14 – 7 = 7
**INSTRUCTION**

You can organize data in a **tally chart**. A tally chart uses **tally marks** to show information. Tally marks are lines that you draw in a special way. Each tally mark stands for 1 of something.

**How to Draw and Count Tally Marks**

Look at this tally chart showing the number of children whose favorite color is blue, red, or green.

<table>
<thead>
<tr>
<th>Favorite Colors</th>
<th>Tally</th>
<th>Number of Children</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blue</td>
<td></td>
<td>10</td>
</tr>
<tr>
<td>Red</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Green</td>
<td></td>
<td>6</td>
</tr>
</tbody>
</table>

You can show 1 child with 1 tally mark.

\[ \begin{align*} 
\text{Blue} &: 1 \\
\text{Red} &: 2 \\
\text{Green} &: 3 \\
\end{align*} \]

Four children are shown with 4 tally marks.

\[ \begin{align*} 
\text{Blue} &: 1 \quad 1 \\
\text{Red} &: 1 \quad 2 \\
\text{Green} &: 1 \quad 3 \\
\end{align*} \]

At 5 children, draw a line across the 4 lines to show 5 tally marks.

\[ \begin{align*} 
\text{Blue} &: 1 \quad 1 \quad 1 \\
\text{Red} &: 1 \quad 2 \quad 1 \\
\text{Green} &: 1 \quad 3 \quad 1 \\
\end{align*} \]

To show 6 children, you draw a new line.

\[ \begin{align*} 
\text{Blue} &: 1 \quad 1 \quad 1 \\
\text{Red} &: 1 \quad 2 \quad 1 \\
\text{Green} &: 1 \quad 3 \quad 1 \\
\end{align*} \]

When you get to 10, you draw a line across the other 4.

\[ \begin{align*} 
\text{Blue} &: 1 \quad 1 \quad 1 \quad 1 \\
\text{Red} &: 1 \quad 2 \quad 1 \quad 1 \\
\text{Green} &: 1 \quad 3 \quad 1 \quad 1 \\
\end{align*} \]

**TIP**

You can use your hand to remember how to make a 5 with tally marks. Make a fist. Do you see how your thumb crosses over your 4 fingers? The fifth tally mark does the same thing.
You can use addition strategies you already know to help you count sets of tally marks. Count by 5s or think of an addition sentence to count each set of 5. Count on to add the single tallies.

\[
\begin{array}{c|c|c}
1 & 2 & 3 \\
\hline
\text{count by 1s} & 5 + 5 = 10 & 11, 12, 13 \\
\text{doubles} & \text{count on} & \\
\hline
 & 5 & 10, 15 \\
\text{count by 5s} & & \\
\end{array}
\]

**Your Turn**

Copy these sets of tally marks on paper. Then write the number of tallies.

1. 
   
   
   
   

2. 
   
   
   

3. 
   
   
   
   

4. 
   
   
   
   

5. Show the numbers 2, 8, 14, and 16 with tally marks on your paper.
Using Tally Charts to Show Data

Tally charts are most helpful when you have a lot of data. Look at this set of data. It shows types of vegetables that a group of children like the best.

You can use tally marks to put the data into a tally chart.

<table>
<thead>
<tr>
<th>Favorite Vegetables</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Vegetables</strong></td>
</tr>
<tr>
<td>Carrot</td>
</tr>
<tr>
<td>Peppers</td>
</tr>
<tr>
<td>Asparagus</td>
</tr>
</tbody>
</table>

First, draw lines for the rows and columns of the tally chart.

Then give your tally chart a title.

Next, draw or write the name of each category on a separate row. For this data, the categories are the different vegetables.

Use one tally mark for each vegetable.

Put a check mark next to or cross out the vegetables in the picture as you record each one on the tally chart.
When you are finished recording all your tallies, count the tally marks in each column.
Write the number of each vegetable in the number column.

<table>
<thead>
<tr>
<th>Vegetables</th>
<th>Tally</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carrot</td>
<td>🥒</td>
<td>5</td>
</tr>
<tr>
<td>Green Bell</td>
<td>🥒</td>
<td>2</td>
</tr>
<tr>
<td>Asparagus</td>
<td>🥒</td>
<td>7</td>
</tr>
</tbody>
</table>

Showing Data Using a Bar Graph

You can show the data from the tally chart on a picture graph. You can also show it on a bar graph. A bar graph is helpful to show large sets of data.

A bar graph uses bars to show data. A bar graph has a title and categories just like a picture graph. It uses a scale instead of a key.

Label the scale with numbers to make it easy to read the data.

You can read a bar graph the same way you read a picture graph.

Help your student to see that he can show the same data in different types of graphs. A tally chart, a picture graph, and a bar graph can all show the same set of data.

Your Turn Answers:
1. 4
2. 7
3. 11
4. 18
You can organize data using a tally chart. Group sets of 5 tally marks together. Put the fifth tally mark across the other 4.

You can show data from the tally chart in a picture graph or a bar graph.

Bar graphs use number scales to help you read the data.
You can organize data using a tally chart. Group sets of 5 tally marks together. Put the fifth tally mark across the other 4.

You can show data from the tally chart in a pictograph or a bar graph.

**SUPPLEMENTAL**

- [BrainPOP Jr: Tally Charts and Bar Graphs](#)
- [Discovery: Counting with a Tally](#)

**QUICK CHECK**

Please go online to view and submit this assessment.

**MORE TO EXPLORE**

If you struggled with this question, remember to include a diagonal tally to show groups of 5.
Today you will solve problems about graphs.

Count the tallies.

1. 6
2. 14
3. 20
4. 11
5. 17

Warm-up Answers:

1. 6
2. 14
3. 20
4. 11
5. 17

INSTRUCTION

Today you will solve problems about graphs.

Turn to Put On Your Thinking Cap! on p. 49 in Math in Focus 1B. Read the problem with your Learning Guide and complete the activity.
**TEACHING NOTES**

**Textbook Answer Key**

Read Put On Your Thinking Cap! on p. 49 in *Math in Focus 1B* together. Ask: What do you need to find out? (the number of sunny days and the number of rainy days) What do you need to do to find the answer? (read the clues given in the directions) Guide your student to choose a strategy he feels will help him solve the problem.

You may have your student make a copy of the blank graph. Remind him to include a title and a key for his graph.

Have your student reread the clues, one sentence at a time. Have him draw symbols on the graph as he reads each sentence. Encourage him to work as independently as possible. Your student may find it helpful to make a chart or list the days of the week and write down the weather for each day.

- Monday: rain
- Tuesday: rain
- Wednesday: sun
- Thursday: sun
- Friday: rain
- Saturday: sun
- Sunday: sun

Guide your student to determine that there are 4 sunny days and 3 rainy days. Based on this information, he should be able to tell you that there is 1 more sunny day than rainy day.

**PRACTICE**

Complete pp. 39–42 in *Workbook 1B*.

**TEACHING NOTES**

**Workbook Answer Key**

Encourage your student to independently complete as much of these activities as possible. After you read the problem together, have your student make a plan for how to solve it. Ask: What do you know? What do you need to find out? How are you going to solve the problem? Frequently ask him to explain his reasoning as he works through the exercises.
WRAP-UP

Today you read and made graphs to show and compare data. You know how to do the following:

- Gather the data.
- Make a graph. A picture graph needs a title and a key. A tally chart needs a list of data, a place for tallies, and a place for the numbers. A bar graph needs a title and labels on the side and bottom.
- Use the graph to answer questions.

USE

USE FOR MASTERY

Look at the bar graph. Fill in the blanks.

![Bar Graph]

**Toys that Rachel has**

<table>
<thead>
<tr>
<th>Types of Toys</th>
<th>Number of Toys</th>
</tr>
</thead>
<tbody>
<tr>
<td>Puzzles</td>
<td>3</td>
</tr>
<tr>
<td>Stuffed Toys</td>
<td>4</td>
</tr>
<tr>
<td>Dolls</td>
<td>2</td>
</tr>
</tbody>
</table>

A. There are _______ more stuffed animals than dolls.

B. There are _______ toys in all.
C. Write number sentences to show how you found your answers.

Did you:

- Use the information provided to answer parts A through C?
- Write a number sentence to show how many more stuffed animals there are than dolls?
- Write a number sentence to show how many toys there are in all?
You learned about a few different types of graphs in this lesson. Now it is time for you to create your own chart or graph to show your times and measurements. You can create a pictograph, bar graph, or tally chart to show your results.

Upload your graph.

Supported file formats: PDF, JPG, GIF, PNG, Word

0 / 2 File Limit
Show: Shadow Clock

It's time to review your project.

**FINAL PROJECT**

Gather your pictures and information for this project. Here is a list of what you should include.

1. The picture of your three sticks labeled A, B, and C
2. Two pictures of your longest stick each showing a different unit being used to measure it
3. Your paper showing the three times that you measured the shadow
4. Your chart showing the lengths of the shadow at each time

Upload everything here.

Supported file formats: PDF, JPG, GIF, PNG, Word

0 / 2 File Limit
What did you notice about the length of the shadow and the time of day?

Tell why you think this happened.

COLLABORATION

You did a great job with your shadow clock. Share with your peers what you noticed about the time of day and the location of the shadow. Then respond to two classmates.
Unit Quiz: Measure It Up and Record It!

Books & Materials
- Math in Focus - Teacher Edition

☑ UNIT QUIZ

Please go online to view and submit this assessment.
Unit 4 – Shapes Around Us
Project: Cake Bakery

PROJECT DESCRIPTION

Cakes are so much fun because they come in so many shapes and sizes, and you can make them look any way that you want. Pretend that you are a cake baker and you specialize in making super fun cakes. In this project, you are going to bake the birthday cake of your dreams using the cookie cutters and cake pans that you are given. Here are some fun videos you can watch to get some great ideas.

- Amazing Animal Cakes
- AMAZING CAKES | LEGO Superheros Pokemon Star Wars Compilation

After you watch the videos, talk to your Learning Guide and ask any questions you have about the project.

PROJECT DETAILS

In this project, you will design a cake using your skills with shapes. To complete this project, you need to:

- Create a design for your cake using tangrams
- Create a beautiful 3D model of your cake using solid shapes or clay
- Create a sample menu showing some of the cakes you sell
- Design an advertisement for your bakery showing the amazing cake you created

PROJECT RUBRIC

The Project Rubric will help you understand how your project will be scored. Your goal should be to earn all 4 points for each part.

SHOW

RATE YOUR EXCITEMENT

Please go online to view and submit this assessment.
COLLABORATION

Think about some of the cakes you have had for your birthday or maybe at a party for someone else. What is the best cake you have ever eaten or seen? Describe it in the box. Then respond to at least two other classmates.
Look at the pictures. What shapes do you see?

1. 

2. 

3. 

Shapes are everywhere. What shapes do you see around you?

Your student may see shapes around him that are a combination of two or more shapes. For example, he may notice that the wheels of a wagon are circles and the base is a rectangle. Talk about shapes using the correct vocabulary.

Your student will be using attribute shapes. Explain why they are called attribute shapes. Attributes are characteristics, like having blonde or brown hair, blue or brown eyes, or big or small hands. Your student should understand the concept but need not use the word attribute at this time.

Warm-up Answers:

1. a rectangle
2. 2 circles
3. a square
INSTRUCTION

Shapes

Many of the objects around you are made with shapes.

This plate is shaped like a square.

This dollar bill is a rectangle.

What shape are the chips?

triangles

What shape is each of the buttons?

a circle

What shape do you see in the leaf?

a triangle
Look at your attribute shapes and name each shape.

- Triangles have 3 sides and 3 corners.
- Rectangles have 4 sides and 4 corners.
- Squares are also rectangles, but they are special because all sides are the same length.
- Circles have no sides and no corners.

Patterns

The following shapes are in a pattern: circle, triangle, circle, triangle.

A pattern is something that repeats over again.

Look at the following shapes.

What pattern do you see?

The pattern is **triangle, triangle, rectangle**.

Which shape would come next in the pattern?

A **rectangle** comes next in the pattern.

---

**TEACHING NOTES**

As your student looks at each picture have him trace the outline of the shape referred to in the sentence with his finger. Encourage him to use the correct word for shapes he finds around the house, at the grocery store, or even in his own toys. Have him make flash cards using index cards. He can write the name of the shape on one side and draw a picture of an example of that shape on the other side.
PRACTICE
Read and complete pp. 98-101 in Math in Focus 1A.

TEACHING NOTES
Textbook Answer Key

Additional Resources:
The following are picture books about shapes you can read with your child and use as conversation starters to name shapes. You can visit the library to find many more books:

- The Greedy Triangle, by Marilyn Burns
- Shapes, Shapes, Shapes and So Many Circles, So Many Squares, by Tana Hoban

WRAP-UP
You see shapes everywhere you look. Even though objects come in different sizes and colors, they can still be the same shape.

You can identify a shape by counting the number of sides.

<table>
<thead>
<tr>
<th>Shape</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Triangle</td>
<td>A triangle has 3 sides and 3 corners.</td>
</tr>
<tr>
<td>Rectangle</td>
<td>A rectangle has 4 sides that are not the same and 4 corners.</td>
</tr>
<tr>
<td>Circle</td>
<td>A circle has no sides and no corners.</td>
</tr>
<tr>
<td>Square</td>
<td>A square has 4 sides that are the same and 4 corners.</td>
</tr>
</tbody>
</table>

Shapes can be set up in patterns. You can look at a pattern to see what shape will come next.

The pattern is circle, triangle, circle, triangle. A circle comes next in the pattern.

SUPPLEMENTAL
- BrainPOP Jr: Patterns
The pattern is circle, triangle, circle, triangle. A circle comes next in the pattern.

BrainPOP Jr: Patterns

Please go online to view and submit this assessment.
Plane Shapes - Part 2

Objectives
- Identify, classify, and describe circles, triangles, squares, and rectangles.
- Identify the sides and corners of shapes.

Books & Materials
- Math in Focus 1A
- Workbook 1A
- Math in Focus - Teacher Edition
- attribute shapes

Assignments
- Complete Warm-Up.
- Read and complete pages in Math in Focus 1A.
- Complete pages in Workbook 1A.
- Complete Practice Questions.

LEARN

WARM-UP
Look at your attribute shapes and name all of them. Then locate the shapes below and answer the questions.

1. Find an object around you that is the shape of a triangle.
2. Find an object that is the shape of a square.
3. Find an object that is the shape of a rectangle.
4. Find an object that is the shape of a circle.
5. What is different between a square and a rectangle?
6. How is a circle different from other shapes?

TEACHING NOTES
Warm-up Answers:
1–4. Answers will vary.
5. A square has 4 sides that are all the same. A rectangle has 4 sides that are not the same.
6. A circle has no sides and no corners.


INSTRUCTION

Look at your attribute shapes. Pick the triangle and the rectangle. How are they the same?

**They have straight sides. They have corners.**

How are they different?

**Rectangles have 4 sides. Triangles have 3 corners.**

You will learn about shapes and how many sides and corners they have.

---

TEACHING NOTES

In the Learn sections, on pp. 102-103, have your student identify and count the corners and sides of each attribute shape.

When your student counts the sides of a shape, make sure each side is counted only once. While classifying the attribute shapes, your student may notice that rectangles and squares have the same number of sides. Point out that squares are special because all their sides are the same length.

---

PRACTICE

Read and complete pp. 102-106 in Math in Focus 1A. Then complete pp. 97-98 in Workbook 1A.

---

TEACHING NOTES

Textbook Answer Key

Workbook Answer Key

---

ENRICHMENT

A square and a rectangle both have 4 sides and 4 corners. Squares are rectangles, but rectangles are not squares. Use objects around you to show this.
**WRAP-UP**

A triangle has 3 sides and 3 corners.  
A square has 4 sides and 4 corners. The sides are all the same length.  
A circle has no sides and no corners.  
A rectangle has 4 sides and 4 corners.

**PRACTICE QUESTIONS**

Please go online to view and submit this assessment.
Plane Shapes - Part 3

**Assignments**
- Complete Interactive Activity.
- Complete Rate Your Understanding.

**LEARN**

**INTERACTIVE ACTIVITY**

Go to the online [Venn Diagram Shape Sorter](#). Work with your Learning Guide to find the different shapes.

**TEACHING NOTES**

Click on the dropdown menu next to “Rule of Circle 1” to choose the name of a shape. The student must move all those shapes into the circle and those with different shapes into the space outside the circle. After a few games, you can change roles and have the student select the shape while you sort.

**RATE YOUR ENTHUSIASM**

Please go online to view and submit this assessment.
When you compare shapes, look at their size, shape, color, number of sides, and number of corners.

1. These shape friends have different shaped bodies. Which one is square?
   - a.  
   - b.  
   - c.  
   - d.  

2. These shape friends have different colors. Which one is gray?
   - a.  
   - b.  

3. These shape friends are different sizes. Which one is bigger?
   - a.  
   - b.  

Warm-up Answers:
1. c
2. b
3. b
**INSTRUCTION**

**Comparing** tells how two or more things are alike and different.

You can compare to see how things are **different** and how they are the **same**. Shapes can be alike or different.

When you compare shapes, look at their size, shape, color, number of sides, and number of corners.

---

**TEACHING NOTES**

When you begin this lesson, you may want to review the **Learn** section on p. 106. For **Hands-On Activity** on p. 107, have your student focus on one similarity when sorting each group. For example, when sorting the shapes, have him focus on finding all of the circles first. Then he can pick the next shape to look for.

---

**PRACTICE**

Read and complete pp. 107-109 in **Math in Focus 1A**. Then complete pp. 99–102 in **Workbook 1A**.

---

**TEACHING NOTES**

**Textbook Answer Key**

**Workbook Answer Key**

Many objects can be sorted, such as buttons, pasta, pencils, crayons, blocks, or toys. The more practice your student has with sorting, the better his visual observation skills will become.

As an enrichment, ask your student for similarities or differences where the answers are not as obvious. For example, compare two pictures or locations, such as a beach and a house. This practice will aid your student in developing spatial thinking about geometric concepts and other mathematical ideas.
WRAP-UP

You can describe a shape by its color, size, shape, number of sides, and number of corners.

This is a circle.

This is a square.

These shapes both have 4 sides and 4 corners.

Looking Forward: In the next lesson, your student will need several large paper shapes. Prepare a circle, three squares, and three equilateral (all sides are the same length) or isosceles (at least two sides and two angles are equal) triangles. Have a few extra sheets of paper to use for rectangles.

SUPPLEMENTAL

Supplemental Math Activity: BrainPOP Jr: Plane Shapes Act

PRACTICE QUESTIONS

Please go online to view and submit this assessment.
LEARN

INTERACTIVE ACTIVITY

In this activity Shape Sorting Match, you will match the shape to the one outlined.

RATE YOUR UNDERSTANDING

Please go online to view and submit this assessment.
Plane Shapes - Part 6

**Objectives**
- Create shapes that are alike.
- Develop an argument based on sound mathematical reasoning.

**Books & Materials**
- Math in Focus 1A
- Workbook 1A
- Math in Focus - Teacher Edition
- prepared paper shapes
- scissors

**Assignments**
- Complete Warm-up.
- Read and complete pages in Math in Focus 1A.
- Complete pages in Workbook 1A.
- Complete Quick Check.

---

**LEARN**

**WARM-UP**

1. How many circles do you see?
2. How many squares do you see?
3. How many big hearts do you see?
4. How many shapes with 4 corners do you see?

**TEACHING NOTES**

**Warm-up Answers:**

1. 3 circles
2. 2 squares
3. 2. big hearts
4. 3 shapes with 4 corners
INSTRUCTION

Use a square sheet of paper and fold it just like the girl in the book did. When you are finished, open the paper back up and draw a line on the fold. Label the shapes A and B, just like in the book.

Notice that these shapes are exactly alike.

Repeat with the triangle and the circle.

TEACHING NOTES

Have your student place the folded shapes on top of each other to see if they are the same. Triangles can be tricky. If your student does not correctly fold the triangle in half the first time, allow him to cut along the fold and compare the two pieces. He will see that the pieces are not the same and try again. Give as many opportunities as needed to find the correct folding method. The process is just as important as the outcome.

PRACTICE

Read and complete pp. 110-115 in Math in Focus 1A. Then complete pp. 103–104 in Workbook 1A.

TEACHING NOTES

Textbook Answer Key

Workbook Answer Key

Folding paper may be challenging for some students. Help start a fold by pinching the bottom and top before completing the fold. Have your student explain his reasoning while completing the activities.

Looking Forward: Prepare 3–4 paper circles and rectangles for the next lesson part.

ENRICHMENT

Use the alphabet (capital letters and lowercase letters) to find out if folding them in half makes two identical line shapes.
WRAP-UP

You can fold shapes to make two new shapes that are exactly the same.

Some shapes can be folded so that the two new shapes are not the same shape or size.

When you fold a shape, count the corners and sides to compare the new shapes. The corners and sides are called attributes.

A triangle has 3 corners and 3 sides.

You can put one shape over the other to see if it is the same.

Quick Check

Please go online to view and submit this assessment.
You can fold shapes to make two new shapes that are exactly the same. Some shapes can be folded so that the two new shapes are not the same shape or size. When you fold a shape, count the corners and sides to compare the new shapes. The corners and sides are called attributes.

A triangle has 3 corners and 3 sides.

You can put one shape over the other to see if it is the same.

Please go online to view and submit this assessment.

MORE TO EXPLORE

Watch the Discovery Education video, *Dividing into Halves*, to review making equal parts.

TEACHING NOTES

The Discovery Education video is also available in Spanish.
In this activity, you will explore Pattern Shapes.

Click and drag several shapes from the box on the left into the screen in the middle. If you want to take a shape off the screen, click on the shape and then the trash can at the bottom.

Now click on the drawing tool at the bottom of the screen. A window will open on the right. Click on the line tool.

Use your pencil to draw lines on your shapes. Try to divide the shapes into equal parts. If you want to take a line off the screen, use the eraser tool. You can also clear the screen by clicking the redo button on the bottom.

Have fun exploring the different shapes!
Please go online to view and submit this assessment.

Help your student with the different tools. As she works with the shapes, be sure she is using the correct terms to identify them. If you would like, you can prepare for the next lesson part by having your student try using shapes to fill in some outlines (the button on the left).
Each of the shapes you used is a part of a whole. They come together to make a whole picture.

Match each shape to its name.

1. square
2. rectangle
3. triangle
4. circle

Warm-up Answers:
1. d
2. c
3. a
4. b
INSTRUCTION

You can combine shapes to make a new picture.

Use your attribute shapes to make this figure.

Tell about the shapes you used.

**You used 2 triangles, 1 square, and 1 circle.**

Each of the shapes you used is **part of a whole**. The square is a part, the circle is a part, and each triangle is a part. They come together to make a whole picture.

TEACHING NOTES

This lesson is intended to make your student aware of the parts of a whole. Making figures and breaking them into parts develops spatial sense.

Have your student name the shapes as he arranges them to make the pictures. If your student finds this activity challenging, start with just two shapes, make a picture, and have him copy you. Add shapes gradually until he is able to copy a picture with four shapes.

For additional practice, you can suggest different items that your student can create with his attribute shapes (e.g., a train, an animal, something that flies).

PRACITCE

Read and complete pp. 122-126 in *Math in Focus 1A*. Then complete pp. 111-116 in *Workbook 1A*. Use your **Cut-out Shapes** for the activity on p. 125.

TEACHING NOTES

- Textbook Answer Key
- Workbook Answer Key

Allow your student to use the attribute shapes as needed to complete the practice exercises.
WRAP-UP

You can use shapes such as squares, circles, triangles, and rectangles to make new shapes and figures.

Each shape is called a part. You can join two or more parts together to make a whole.

Look at the truck. The circles, triangle, and rectangle are parts that make up the truck. The truck is the whole.

QUICK CHECK

Please go online to view and submit this assessment.

MORE TO EXPLORE

If you choose a circle and a square, remember that circles are round and do not have straight sides. Watch the video Putting Shapes Together to practice identifying shapes when they are combined.

TEACHING NOTES

This link will take you to a Spanish version of Putting Shapes Together.
LEARN

WARM-UP
Use your attribute shapes to make a picture. What shapes did you use?

TEACHING NOTES

Warm-up Answer:
Answers will vary.

INSTRUCTION

In this lesson, you will learn about a special puzzle called a tangram. The tangram started in China a long time ago.

Download, print, and cut out the Tangram Plane Shapes. Then carefully cut on the lines to separate the shapes.
Name each of the shapes. How many sides and corners do they have?

The square has 4 sides and 4 corners. The triangles have 3 sides and 3 corners.

Do you know the name of this shape?

This shape is a parallelogram. It has 4 sides and 4 corners. It looks like a rectangle that is leaning to one side.

You can use these shapes to make pictures. Use all the pieces to make a cat.

The parts (shapes) made a whole (cat). Now, make a rabbit.

Try making a bird, such as a duck. Remember, each shape is a part, and the figure you make is a whole.
Tangrams provide a fun way for your student to see how plane figures combine to make complex figures. Generally, historians agree the puzzle originated in China long ago. Some people have called this a wisdom puzzle. These puzzles will aid your student in developing problem-solving and spatial reasoning skills.

Cut out the Tangram Plane Shapes. You can make a house, a sailboat, and a fish using the tangram pieces.

Some students have difficulty visualizing the arrangement of shapes and need more assistance. Provide time for free play with the tangram pieces. The more time your student spends with the shapes, the more familiar he will become with how to manipulate them into complex figures.

Read the stories on the following website. They are written by children and use tangram pictures as illustrations. Make up your own story about tangram figures you build.

You might like to watch this video, The Happy Square Tangram.

Please go online to view this video ▶
WRAP-UP

This candle picture is made from a set of tangrams. It is made up of 7 plane shapes. You can use the shapes to solve puzzles or make tangram puzzles of your own.

USE

USE FOR MASTERY

A. What two shapes can form a rectangle? Select the correct answers.
B. Which shapes have the same name?

Did you:

- Select the 2 shapes that form a rectangle?
- Select ALL the shapes that have the same name?
- Explain why you chose those shapes?
INTERACTIVE ACTIVITY

Go to the online Geoboard.

TEACHING NOTES

Encourage your student to explore making shapes on the geoboard. Start by selecting a colored rubber band from the bottom of the screen, placing it on the board, and stretching it around different pegs to make a shape. Once your student gets the idea, he or she can make different shapes with straight sides and even put shapes next to each other to combine them. You can also have your student try to place a single rubber band in a line to divide shapes into equal parts.

You can also experiment with the tools in the menu at the bottom of the screen. Your student can select different sizes and shapes of geoboards, including circular, and use the drawing tools to write the names of the different shapes on the screen. Use this activity as an opportunity to review important concepts from this lesson.
RATE YOUR UNDERSTANDING

Please go online to view and submit this assessment.
You are going to start by thinking of how you want to decorate your cake. You have a set of tangram cookie cutters.

Think of what you will make. Use your own tangrams or this link for paper tangrams to create your design. Once you have your design, have fun and color it in. You have many icing colors, so there is no limit to the colors you can use.

Tangram Patterns

Take a picture of your design. Save it to send with the final project.

PROJECT PROGRESS

Please go online to view and submit this assessment.
## Solid Shapes - Part 1

### Objectives
- Identify and classify solid shapes.

### Books & Materials
- Math in Focus 1A
- Workbook 1A
- Math in Focus - Teacher Edition
- solid shapes
- ball, orange, or other sphere-shaped object
- scissors (Optional)
- newspaper (Optional)
- packaging tape or duct tape (Optional)

### Assignments
- Complete Warm-Up.
- Read and complete pages in *Math in Focus 1A*.
- Complete pages in *Workbook 1A*.
- Complete Practice Questions.

### LEARN

#### WARM-UP

1. Choose the shape that is divided into fourths.

   a. ![Shape A](image1)
   b. ![Shape B](image2)
   c. ![Shape C](image3)
   d. ![Shape D](image4)

2. Choose the shape that is divided into halves.

   a. ![Shape A](image1)
   b. ![Shape B](image2)
   c. ![Shape C](image3)
   d. ![Shape D](image4)

### TEACHING NOTES

Count the parts of a whole with your student. Say: One of four parts, two of four parts, three of four parts, and four of four parts. Four of four parts make one whole.

**Warm-up Answers:**

1. c
2. b
Today you are going to explore the following **solid shapes**. Use your solid shapes as you complete this lesson.

Look at the sides of the rectangular prism. What shapes do you see? Can you slide it across the table? Can you stack it on top of other objects like it? Can you roll it across the table?

You see rectangles and squares. It can slide and stack.

A rectangle is a flat shape, but a rectangular prism is a solid shape. Turn the prism around and find the 2 squares and 4 rectangles that make up the solid shape.

Look at the cube. What flat shapes do you see? Can it slide, stack, or roll?

You see 6 squares. The cube can slide and stack.

Look at the sphere. What shape do you see? Can it slide, stack, or roll?

No matter how you look at the sphere, you always see a circle. It can only roll.

Look at the cone. What two shapes do you see? Can it slide, stack, or roll?

There is a circle on the bottom, and you can see a triangle from all directions on the side. It can slide and roll. It can stack on flat objects. It cannot stack on other cones.

Look at the cylinder. What shapes do you see? Can it slide, stack, or roll?

The top and bottom are made with circles, and the middle is shaped like a rolled-up rectangle. It can slide, stack, and roll.

Look at the pyramid. What shapes do you see? Can it slide, stack, or roll?

You see a square on the bottom and triangles on the sides. It can slide. It can stack on flat objects. It cannot stack on other pyramids.
Give your student plenty of opportunity to explore and manipulate the solid shapes. Have him try to slide, stack, and roll the shapes.

Read and complete pp. 116–121 in *Math in Focus 1A*. Then complete pp. 107–110 in *Workbook 1A*.

This is an opportunity for your student to see how three-dimensional objects are represented in two-dimensional pictures. Ask: How are the solid shapes different from the attribute shapes you have been using? How do you know these are solid shapes?

Today you learned about the following solid figures.

![Rectangular prism](image1.png) ![Sphere](image2.png) ![Cone](image3.png) ![Cylinder](image4.png) ![Cube](image5.png) ![Pyramid](image6.png)

Tell about the flat shapes you see on the solid shapes. Tell whether the solid shapes slide, stack, or roll.

Please go online to view and submit this assessment.
Solid Shapes - Part 2

Objectives
- Combine solid shapes to make models.

Books & Materials
- Math in Focus 1A
- Workbook 1A
- Math in Focus - Teacher Edition
- solid shapes
- ball, orange, or other sphere-shaped object

Assignments
- Complete Warm-Up.
- Read and complete pages in Math in Focus 1A.
- Complete pages in Workbook 1A.
- Complete Quick Check.

LEARN

WARM-UP

1. Do you remember these shapes? Name each shape.
2. Find the pyramid, cone, sphere, cylinder, cube, and rectangular prism from your solid shapes.
3. Join two or three of these shapes together to make a new figure.

Warm-up Answers:
1 rectangular prism, sphere, cone, cylinder, cube, pyramid
2 Check your student's work for accuracy.
3 Answers will vary.

TEACHING NOTES

INSTRUCTION

These shapes can stack to make a model.
It can look like this or this.

Use your solid shapes to build these figures. Then use the solid shapes to make a new figure.

**TEACHING NOTES**

Look at the first model on p. 127 in *Math in Focus*. Have your student explain how he is constructing the model as he builds it. Make sure he is describing each solid shape being used. Then have him give you instructions on how to build the second model. Follow his directives until the model is complete. Then have him determine if the model is correct.

For the **Hands-On Activity** encourage your student to create different models with the shapes. Your student can either use the solid shapes or real-life objects of the same shape to build the models in this lesson. You may also use empty cardboard boxes and cylinders to make solid shapes, or you can use solid shapes made from clay as an alternative.

**PRACTICE**

Read and complete pp. 127-129 in *Math in Focus*. Then complete pp. 111–112 in *Workbook*.

**TEACHING NOTES**

*Textbook Answer Key*

*Workbook Answer Key*

This lesson provides an opportunity for students to connect concrete objects and pictorial representations of real-life objects. Continue to encourage your student to work from the picture to the model to help solidify his reasoning and spatial sense.
ENRICHMENT
Look at pictures of buildings near where you live. Use solid shapes to create a similar building.

WRAP-UP
Solid shapes are all around us. When you build models with solid shapes, you can imagine what the models look like in real life.

QUICK CHECK
Please go online to view and submit this assessment.

MORE TO EXPLORE
Watch the Discovery Education video, Three Dimensional Shapes, to review what you have learned about solid shapes.
Solid Shapes - Part 3

**Objectives**
- Identify plane shapes and solid shapes in the environment.

**Books & Materials**
- Math in Focus 1A
- Workbook 1A
- Math in Focus - Teacher Edition
- a can (coffee, oatmeal, soda)
- number cube
- paper (Optional)
- magazines (Optional)
- crayons (Optional)
- scissors (Optional)
- glue (Optional)
- notebook (Optional)

**Assignments**
- Complete Warm-Up.
- Read and complete pages in *Math in Focus 1A*.
- Complete pages in *Workbook 1A*.
- Complete Use For Mastery.

---

**LEARN**

**WARM-UP**

This is a triangular prism. It is a solid figure just like a rectangular prism.

1. Name the plane shapes you see on the sides of the prism.
2. How many of each shape do you see?

**Warm-up Answers:**
1 rectangles, triangles
2 There are 3 rectangles and 2 triangles.

**TEACHING NOTES**

**Warm-up Answers:**
1 rectangles, triangles
2 There are 3 rectangles and 2 triangles.

**INSTRUCTION**

Shapes are all around us.

Place a can on a piece of paper and trace the bottom. What shape did you draw?

You drew a circle.
You drew a circle. Place the number cube on a piece of paper and trace the bottom. What shape did you draw?

You drew a square.

Now turn the number cube over. What shape do you see?

No matter which way you turn the cube, you will see a square.

Look at the ball, juice box, ice-cream cone, and sign. What shapes do you see?

The ball is a sphere, the juice box is a rectangular prism, the ice-cream cone is a cone, and the sign is a triangle.

Go on a shape hunt and identify what you find. Tell whether they are plane shapes or solid shapes. Tell the name of each shape you find.

**PRACTICE**

Read and complete pp. 130–134 in *Math in Focus 1A*. Then complete pp. 113–116 in *Workbook 1A*.

**TEACHING NOTES**

Textbook Answer Key

Workbook Answer Key

Provide lots of opportunities to look for shapes in the environment. The practice pages are representational, whereas real-life objects provide concrete examples of shapes. Keep your camera handy when you are out with your student so you can document the shapes you find.

**ENRICHMENT**

Make a shape book. You can cut pictures out of magazines and identify their shapes. The pictures can be glued into a notebook and labeled. You can take pictures of objects around you or draw pictures in your book.
WRAP-UP
You see shapes every day.

You see shapes at breakfast.
A cereal box is a rectangular prism. The placemat is a circle.

You see shapes at lunch.
The chips are triangles. The juice carton is a rectangular prism. The orange is a sphere.

You see shapes at dinner.
The placemat is a rectangle. The plate is a circle. The glass is a cylinder.

USE

USE FOR MASTERY
Look at the picture.
Fill in the blanks.

A. The picture has [ ] cubes.

B. The picture has [ ] cones.

C. The picture has [ ] more cylinder(s) than cones.

D. How did you solve part C? Type your answer in the box.

D. [ ]

USE FOR MASTERY GUIDELINES & RUBRIC

Did you:

- Provide an answer for questions A through D?
- Give an explanation telling how you came to your answer in question C?
Solid Shapes - Part 4

Books & Materials
- Math in Focus - Teacher Edition

Assignments
- Complete Interactive Activity.
- Complete Rate Your Understanding.

LEARN

INTERACTIVE ACTIVITY
Go to the BrainPop Jr. activity, Solid Shapes. Watch the video. Then try some of the other activities.

RATE YOUR UNDERSTANDING
Please go online to view and submit this assessment.
Now it is time to make your cake. You saw in many of the videos you watched that there are all kinds of cake designs. You can use more than one type of pan to create your cake. You have a few pans. You have some rectangular prisms, cubes, cylinders, and cones. They come in every size you can imagine. Think of how you would use these shapes to build your cake. Once you have your ideas, create your cake. Your cake should be a combination of at least three solid shapes. You can use modeling clay or items around your house that are the correct shape. (You could paint them or cover them in wrapping paper for a really cool design) If you have the materials, you could even bake a cake. Just make sure you will be able to fit your tangram cookies on it.

When you are finished, take a picture of your cake. Save it to send in with the final project.

Please go online to view and submit this assessment.
Dividing Shapes - Part 1

**Objectives**
- Divide circles and rectangles into equal parts and describe them in relation to the whole.
- Use the terms half, fourth, and quarter to represent the appropriate parts of shapes.

**Books & Materials**
- Math in Focus - Teacher Edition
- paper circles and rectangles (3–4 of each)
- scissors

**Assignments**
- Complete Warm–Up.
- Complete Practice.
- Complete Quick Check.

---

**LEARN**

**WARM-UP**
Look at these numbers. Listen as your Learning Guide tells you what to do.

9  5  7  3  6  8  10

---

**TEACHING NOTES**

Say the following directions to your student:

- Add 1 more to each of the numbers as I point to them.
- Add 2 more to each of the numbers as I point to them.
- Take away 2 from each of the numbers as I point to them.

As an enrichment, say: Count backward by 2s from each of the numbers as I point to them.

**Warm-up Answer:**
Check your student’s work for accuracy.

---

**INSTRUCTION**

Fold a paper circle down the middle to make 2 shapes that are exactly alike. Draw a line along the fold.

Each part of the circle is called a half. This circle has two halves. Each half is the same size.
Cut along the fold.

![Circle divided into two equal parts with text: This is one half of a circle.]

Place the two halves back together. Two halves make one whole.

Now fold one of the half pieces again to make two shapes that are exactly alike. Cut along the fold.

Fold the other half to make two equal shapes. Cut along the fold.

Each of these parts is called a **fourth**. Each fourth is the same size.

This is 1 of 4 parts of a circle. You can also say this is **one-fourth** of a circle.

This is 2 of 4 parts of a circle. It is also **two-fourths** of a circle.

This is 3 of 4 parts of a circle. You can also say it is **three-fourths** of a circle.

Place the other fourth of the circle with the other three parts.

This is 4 of 4 parts of a circle or **four-fourths** of a circle. This is one whole circle.

Now take the circle apart. Count aloud while you build the circle again.

![Circle divided into four equal parts with text: One of four, two of four, three of four, four of four. Four of four makes a whole circle.]

One of four, two of four, three of four, four of four. Four of four makes a whole circle.

One-fourth, two-fourths, three-fourths, four-fourths. Four-fourths make a whole circle.
Another word for fourth is **quarter**. There are four quarters in a dollar. This can help you remember that a quarter is the same as one-fourth.

**Your Turn**

Follow the previous instructions with a paper rectangle. Show a quarter of the rectangle, half of the rectangle, three-fourths of the rectangle, 1 of 4 parts of the rectangle, and 4 of 4 parts of the rectangle.

---

**TEACHING NOTES**

Find objects for your student that are divided into halves and fourths (quarters). Compare the equal parts to point out that they are the same size. When counting say: one of four, two of four, three of four, four of four. Four of four makes one whole. This emphasizes the concept of parts of the whole.

You may find it helpful to view the following video:
**Instructional Support Video:** [Learning About Fractions and How You Can Help](#)

---

**PRACTICE**

Use the pictures to answer questions 1–3.

1. Which picture shows one-fourth of a circle colored?

   ![Circle Pictures](a.png)

   a.  
   b.  
   c.  
   d.  

2. Which picture shows one-half of a circle colored?

3. Which picture shows two-halves of a circle colored?

   Use the pictures to answer questions 4–6.

1. Which picture shows one-fourth colored?

2. Which picture shows one-half colored?

3. Which picture shows a whole rectangle colored?
Choose the correct shape.

7. Which shape is divided into fourths?

   a.  
   b.  
   c.  

8. Which shape is divided into halves?

   a.  
   b.  
   c.  

Match each part of the circle to its name.

9. one-half  10. one whole  11. one-quarter  12. three-fourths

Fractions are relationships of parts to a whole. When you discuss fractions, keep referring to the whole. Say one-fourth of the whole circle. This will help your student differentiate fractions from whole numbers.

You can compare a number used as a fraction to a word with two meanings, such as the bark of a dog and the bark of a tree. The number 3 can be a whole number, or it can be the number of parts of a whole. Just as with the word bark, it is necessary to know the context to understand if a number is referring to a fraction or to a whole number. Be very explicit when first teaching fractions to help your student think about this new way to use numbers.

Practice Answers:

1. a
2. c
3. d
4. b
5. c
6. d
8. Which shape is divided into halves?

9. Match each part of the circle to its name.
   a. one-half
   b. one whole
   c. one-quarter
   d. three-fourths

Fractions are relationships of parts to a whole. When you discuss fractions, keep referring to the whole. Say one-fourth of the whole circle. This will help your student differentiate fractions from whole numbers.

You can compare a number used as a fraction to a word with two meanings, such as the bark of a dog and the bark of a tree. The number 3 can be a whole number, or it can be the number of parts of a whole. Just as with the word bark, it is necessary to know the context to understand if a number is referring to a fraction or to a whole number. Be very explicit when first teaching fractions to help your student think about this new way to use numbers.

Practice Answers:
1. a  
2. c  
3. d  
4. b  
5. c  
6. d  
7. a  
8. c  
9. d  
10. a  
11. c  
12. b

WRAP-UP
This is one whole. This is one-half. This is one-fourth (or one quarter).

TEACHING NOTES
Make sure your student knows the terms one-fourth and one quarter.

Looking Forward: Punch out, fold, and tape the cube, rectangle (rectangular prism), cylinder, cone, and pyramid from the Print-Out Resources. Tip: You may wish to stuff the shapes with paper and cover them with packing tape or duct tape to make them more durable.

QUICK CHECK
Please go online to view and submit this assessment.

MORE TO EXPLORE
In this lesson, you learned how to divide shapes into smaller parts. Watch the video Equal Parts (09:35) to learn more about how to make smaller parts from a shale.

Please go online to view this video
Dividing Shapes - Part 2

LEARN

INTERACTIVE ACTIVITY
Go to the online Geoboard.

Books & Materials
- Math in Focus - Teacher Edition

Assignments
- Complete Interactive Activity.
- Complete Rate Your Enthusiasm.

TEACHING NOTES
Encourage your student to explore making shapes on the geoboard. Start by selecting a colored rubber band from the bottom of the screen, placing it on the board, and stretching it around different pegs to make a shape. Once your student gets the idea, he or she can make different shapes with straight sides. Next have your student try to place a single rubber band in a line to divide shapes into equal parts. Make sure your student has practice dividing shapes into halves and fourths.

You can also experiment with the tools in the menu at the bottom of the screen. Your student can select different sizes and shapes of geoboards, including circular, and use the drawing tools to write the names of the different shapes on the screen. Use this activity as an opportunity to review important concepts from this lesson.
RATE YOUR ENTHUSIASM

Please go online to view and submit this assessment.
Dividing Shapes - Part 3

Books & Materials
- Math in Focus - Teacher Edition

Assignments
- Complete Interactive Activity.
- Complete Use For Mastery.

LEARN

INTERACTIVE ACTIVITY

In this activity, Halves and Quarters Interactives, you will practice identifying parts of shapes.

A. Divide this square into fourths.
Shade one fourth.

USE

USE FOR MASTERY

A. Divide this square into fourths.
Shade one fourth.
B. Divide this square into halves.
Shade one half of the square.

C. Erica says fourths are larger than halves. Do you agree? Explain your answer.

USE FOR MASTERY GUIDELINES & RUBRIC
Did you:

- Divide the square in A into 4 equal parts and shade in 1/4?
- Divide the square in B into 2 equal parts and shade in 1/2?
- Agree or disagree with Erica?
- Tell why you agree or disagree?
You just received a call from another customer who would like to know if you serve half and quarter cakes and what they would look like. You are going to sell cylinder cakes and rectangular prism cakes in halves and quarters.

Create a menu for these cakes. Draw 2 rectangles to show the tops of the rectangular prisms. Draw 2 circles to show the tops of the cylinders. Show how you can divide 1 rectangle and 1 circle in half. Show how you can divide the second rectangle and the second circle in fourths. Then shade the portions you are selling. Scan or take a picture of your menu and save it to send in with the final project.

**PROJECT PROGRESS**

How ready do you feel to complete this part of the project?

- I feel very ready to complete this part of the project; I have learned everything I need to know to do it.
- I feel somewhat ready to complete this part of the project but I am unsure that I have learned everything I need to know to do it.
- I do not feel ready to complete this part of the project.
- I feel very unprepared to complete this part of the project.
- I feel very excited to complete this part of the project.
- I feel somewhat excited to complete this part of the project.
- I do not feel excited to complete this part of the project.
- I feel completing this part of the project will be very boring.
Now it is time to bring it all together. Create an advertisement for your bakery showing your cake and the name of your bakery. Have fun and be creative!

Now upload all the files for your project. Be sure to include the following:

- The photo of your tangram design
- The photo of your 3D cake model
- Your menu showing the cakes in halves and fourths
- Your advertisement

**FINAL PROJECT**

Upload all your files.

Supported file formats: PDF, JPG, GIF, PNG, Word, Powerpoint, Publisher, Open Office, Video

**COLLABORATION**

Tell your classmates about your bakery. What type of cake did you make? What flavor was it? What else does your bakery specialize in? Don't forget to include the name of your bakery. Then respond to at least two classmates.
Unit Quiz: Shapes Around Us

Books & Materials
- Math in Focus - Teacher Edition

☑ UNIT QUIZ

Please go online to view and submit this assessment.
Unit 5 – Working with Two-Digit Numbers
LEARN

PLAY A GAME CALLED Make a Ten:

1. Put the number cards in a bag or envelope.
2. Take the cards out one at a time.
3. Tell what number you need to add to make a ten.

For example, if you pull out 3, you say: 7 (3 + 7 = 10).

You may use connecting cubes or counters to help.

WARM-UP

INSTRUCTION

You can use number bonds to help you solve addition sentences.

The greatest number in this number bond is 10.

The whole is 10. The parts are 4 and 6.

4 + 6 = 10
Different number bonds can show the same whole using different parts.

![Number bonds showing the number 10 in different combinations]

**Add by Making a Ten**

When you know how to break apart the number 10 into different parts, you can use the **add by making a ten** strategy to help you add.

Look at this addition sentence.

\[ 7 + 4 = ? \]

Look at the problem again: \( 7 + 4 = ? \)

What do you need to add to 7 to make 10?

You need to add 3.

Now rewrite the problem with this number bond.

\[ 7 + 3 = 10 \]

You can group the 7 and the 3 together to make a 10.

\[ 7 + 3 = 10 \]

Add the 1 that is left.

\[ 10 + 1 = 11 \]

\[ 7 + 4 = 11 \]

**Group into a 10 and Ones to Add**

You can also use the **group into a 10 and ones** strategy to help you add.
Look at this problem:

\[ 15 + 3 = ? \]

Rename 15 so that you have a 10. Draw a number bond to help you.

Fifteen is the same as 10 and 5.

Add the two sets of ones, 5 and 3, together.

\[ 5 + 3 = 8 \]

Add the group of 10 to the ones, 8.

\[ 10 + 8 = 18, \text{ so } 15 + 3 = 18. \]

**Group into a 10 and Ones to Subtract**

You can use the same group into a 10 and ones strategy to help you subtract. Look at this problem:

\[ 17 - 2 = ? \]

Make a group of 10 with the number 17. Draw a number bond to help you.

17 is the same as 10 and 7.

Subtract the two sets of ones, 7 and 2.

\[ 7 - 2 = 5 \]

Add the 10 to the ones that are left.

\[ 10 + 5 = 15, \text{ so } 17 - 2 = 15. \]
Since your student is familiar with number bonds, he may practice these strategies by drawing number bonds. Encourage your student to try to solve each example in different ways to build flexible thinking.

If your student has difficulty drawing the number bonds, allow him to build each number with connecting cubes. He can then break the cubes apart to model the parts of the number bonds. Provide additional practice using each strategy, if necessary.

Read and complete pp. 80–83 in Math in Focus 1B.

Textbook Answer Key

You can use number bonds to add. You can make a ten.

You can also add or subtract by grouping into a 10 and ones.

15 + 3 = ?

17 − 2 = ?
You can also add or subtract by grouping into a 10 and ones.

15 + 3 = ?

Please go online to view and submit this assessment.
Using Place Value to Add and Subtract - Part 2

**Objectives**
- Add two-digit numbers without regrouping.

**Books & Materials**
- Math in Focus 1B
- Workbook 1B
- Math in Focus - Teacher Edition
- counters
- counting tape
- base-ten blocks
- place-value charts
- place-value mat

**Assignments**
- Complete Warm-Up.
- Read and complete pages in *Math in Focus 1B*.
- Complete pages in *Workbook 1B*.
- Complete Practice Questions.

---

**LEARN**

**WARM-UP**

Build each set of numbers with counters. Then write an addition sentence. Use an addition strategy to solve the problem.

**Example: 10 and 5**

\[10 + 5 = \_\_\_\_\_\_\_\_\_\]

\[
\begin{array}{c}
\text{\textbf{\red{\textbullet\textbullet\textbullet\textbullet\textbullet\textbullet\textbullet\textbullet}}}
\end{array}
\begin{array}{c}
\text{\textbf{\red{\textbullet\textbullet}}}
\end{array}
= \begin{array}{c}
\text{\textbf{\red{\textbullet\textbullet\textbullet\textbullet\textbullet\textbullet\textbullet\textbullet\textbullet\textbullet}}}
\end{array}
\]

\[10 + 5 = 15\]

1. 9 and 6
2. 10 and 3
3. 13 and 4

---

**TEACHING NOTES**

For the Instruction, you may want to cut out and attach the counting tape strips into one continuous strip of counting tape. Use tape to attach the strips from 1–40.

**Warm-up Answers:**

1. \(9 + 6 = 15\)
2. \(10 + 3 = 13\)
3. \(13 + 4 = 17\)
**INSTRUCTION**

How would you solve this problem?

\[ 14 + 4 = ? \]

You can use your counting tape and count on from the greater number.

![Counting Tape](image)

You can use place value to add. Add the ones and then the tens.

![Place Value Chart](image)

You can also show the problem like this:

\[
\begin{array}{c|c}
\text{Tens} & \text{Ones} \\
\hline
1 & 4 \\
+ & 4 \\
\hline
1 & 8 \\
\end{array}
\]

You can add two 2-digit numbers using the same strategies.

**TIP**

When you have greater numbers, it is better to add using place value instead of counting on.

**TEACHING NOTES**

Work through each example with your student in the Learn sections on pp. 84–85 in Math in Focus 1B. Use the counting tape to practice counting on. Use the place-value chart and draw number bonds as well.
If your student prefers counting, allow him to try using the method in the Learn section on p. 89. Discuss with him why it may not be the best method to use when adding 2-digit numbers.

Remind him to always start with the ones, then add the tens. Have him model each of the numbers with base-ten blocks to help him visualize the process of using place value to solve addition sentences. Review basic math facts, if necessary.

**PRACTICE**
Read and complete pp. 84–93 in *Math in Focus 1B*. Then complete pp. 61–64 in *Workbook 1B*.

**TEACHING NOTES**
- Textbook Answer Key
- Workbook Answer Key

**WRAP-UP**
You can add 2-digit numbers by counting on. Count on from the greater number.

\[ 15 + 3 = ? \]

Say 15 and count on 3 more:

\[ 16, 17, 18 \]

You can also use place value.

![Place Value Chart]

Add the ones first. Then add the tens.
Please go online to view and submit this assessment.
Using Place Value to Add and Subtract - Part 3

Objectives
- Add 2-digit numbers with regrouping.
- Use models to demonstrate mathematical concepts and/or solve problems.

Books & Materials
- Math in Focus 1B
- Workbook 1B
- Math in Focus - Teacher Edition
- connecting cubes
- place-value mat
- beans of 2 different colors
- number cube

Assignments
- Complete Warm-Up.
- Read and complete pages in Math in Focus 1B.
- Complete pages in Workbook 1B.
- Complete Quick Check.

LEARN

WARM-UP
Play Race to 40! on pp. 94–95 in Math in Focus 1B.

TEACHING NOTES
Guide your student as he plays the game to pay attention to the value of the beans. When he regroups and creates a ten, point out that the 1 in the tens place and the 0 in the ones place look like the number 10. Focus on place value and creating tens.

Warm-up Answer:
Check your student's responses for accuracy.

INSTRUCTION
You have learned how to add 2-digit numbers without regrouping. Today, you will add 2-digit numbers with regrouping.

When you made a ten from 10 ones while playing the Race to 40! game, you were regrouping.

Adding with Regrouping
Now use your connecting cubes and place-value mat to add 18 and 4.
First put 18, 1 ten and 8 ones, on your place-value mat.

Now add 4 more ones.

$$18 + 4 = ?$$

How many ones do you have now?

You have 12 ones.

Whenever you have more than 9 ones, you can regroup to make a ten.

Regroup 10 of the 12 ones by making a number train. Move the new group of 10 over to the tens column.

How many tens do you have now? How many ones do you have?

Now you have 2 tens and 2 ones.

$$2 \text{ tens} + 2 \text{ ones} = 22$$

You can also show the same problem on your paper.
First add the numbers in the ones column.

8 ones + 4 ones = 12 ones

Regroup 12 ones into 1 ten and 2 ones.

Write the 2 under the ones column. Write 1 above the number 1 in the tens column.

You have regrouped 1 ten and moved it to the tens column.

Now add the numbers in the tens column.

1 ten + 1 ten = 2 tens
2 tens + 2 ones = 22
18 + 4 = 22

TEACHING NOTES

Have your student model each number with connecting cubes. Guide him as he makes a group of ten and moves that new group of ten over with the other tens. Have him count the ones that are left first and then add the tens.

Point out that the number 10 and other 2-digit numbers are made up of ones and tens. Have him practice writing each number in a place-value chart, if necessary. Use the term regrouping when appropriate.

PRACTICE

Read and complete pp. 94–97 in Math in Focus 1B. Then complete p. 65 in Workbook 1B.

TEACHING NOTES

Textbook Answer Key
Workbook Answer Key
Sometimes when you add numbers together, you need to regroup.

17 + 6 = ?

Please go online to view and submit this assessment.

If you need help with this question, use base-ten blocks and/or a place-value chart until you get more comfortable with regrouping and keeping places aligned.
Using Place Value to Add and Subtract - Part 4

Books & Materials
- Math in Focus - Teacher Edition
- Math in Focus 1B

Assignments
- Complete Interactive Activity.
- Complete Rate Your Understanding.

LEARN

INTERACTIVE ACTIVITY

Use these base-ten blocks to show these problems. Remember to regroup when you have 10 in the ones column.

Now try some of the addition problems from pp. 99-100 in Math in Focus 1B.

TEACHING NOTES

Interactive Activity Answers:

1 28 2 31 3 31

Have your student use the interactive base-ten blocks to model some of the addition problems from this lesson. Do not use the hundreds part of the chart; just model problems with sums less than 40.

RATE YOUR UNDERSTANDING

Please go online to view and submit this assessment.
Using Place Value to Add and Subtract - Part 5

**Objectives**
- Add two 2-digit numbers with regrouping.

**Books & Materials**
- Math in Focus 1B
- Workbook 1B
- Math in Focus - Teacher Edition
- connecting cubes
- place-value mat

**Assignments**
- Complete Warm-Up.
- Read and complete pages in Math in Focus 1B.
- Complete pages in Workbook 1B.
- Complete Practice Questions.

**LEARN**

**WARM-UP**

Your Learning Guide will say a number. Add 10 and say the new number.

**TEACHING NOTES**

Say a number between 0 and 9 to your student. Have your student add 10 to that number and then say the answer out loud. Encourage him to use mental math to solve. Repeat this 5 times each with a different number from 0 to 9.

If he does well, say numbers between 10 and 20, and have him subtract 10 from the number.

**Warm-up Answer:**

Check your student's responses for accuracy.

**INSTRUCTION**

Today you will add two 2-digit numbers with regrouping.

Solve 16 + 19 = ?
First, model each number with connecting cubes on your place-value chart.

Then add the ones.
There are 15 ones all together, so you can regroup 15 ones into tens and ones.

\[ 15 = 1 \text{ ten} + 5 \text{ ones} \]

Make a group of ten and move it to the tens column on your place-value chart.

Now add the tens.
There are 3 tens.

\[ 3 \text{ tens} + 5 \text{ ones} = 35 \]
You can also solve this problem on paper.
Write 16 + 19 by lining up the ones and tens.

When you line up the one and tens, you are writing the problem in \textit{place-value form}.

\begin{center}
\begin{tabular}{c c c c}
\hline
& & \textbf{Tens} & \textbf{Ones} \\
\hline
1 & 6 & & \\
+ & 1 & 9 & \\
\hline
& & 3 & 5 \\
\hline
\end{tabular}
\end{center}

What is the next step?
Add the ones together.
\begin{center}
\begin{tabular}{c}
\textbf{6 ones} + \textbf{9 ones} = \textbf{15 ones}
\end{tabular}
\end{center}
Regroup 15 ones into 1 ten and 5 ones.
Write the 1 ten at the top of the tens column.
Write the 5 ones under the answer line in the ones column.

What is the next step?
Add the tens.
\begin{center}
\begin{tabular}{c}
\textbf{1 ten} + \textbf{1 ten} + \textbf{1 ten} = \textbf{3 tens}
\end{tabular}
\end{center}
Write the 3 under the answer line in the tens column.
\begin{center}
16 + 19 = 35
\end{center}

\begin{teaching_notes}
\textit{TEACHING NOTES}

\textit{Allow your student to use connecting cubes for support and to check his work. Ask your student to explain each step as he solves each problem. If your student can show that he understands the process of regrouping, allow him to try solving each problem without using the manipulatives.}

Remind your student to always start with the ones. Have him stop and ask himself if he needs to regroup. He will need to regroup any digit greater than 9 into tens and ones.

A common mistake many students make is to not regroup the ones. If he solves \begin{center}
\begin{tabular}{c}
\textbf{24} \\
+ \textbf{9}
\end{tabular}
\end{center}, ask him to tell you if the answer is reasonable. Point out that 213 is significantly more than 24. Have him go back and check his work. Guide him to notice that he did not regroup the ones place.
\end{teaching_notes}

\begin{practice}
\textit{PRACTICE}

Read and complete pp. 98–100 in \textit{Math in Focus 1B}. Then complete pp. 66–68 in \textit{Workbook 1B}.
\end{practice}
You can add 2-digit numbers by writing the problem in place value form.

Line up the ones in the ones column and the tens in the tens column.

\[ 13 + 18 = ? \]

First add the ones together.

3 ones + 8 ones = 11 ones

Regroup 11 ones into 1 ten and 1 one.

Then add the tens.

1 ten + 1 ten + 1 ten = 3 tens

13 + 18 = 31

Please go online to view and submit this assessment.
# Using Place Value to Add and Subtract - Part 6

## Objectives
- Add three numbers.

## Books & Materials
- Math in Focus 1B
- Workbook 1B
- *Math in Focus - Teacher Edition*
- Connecting cubes

## Assignments
- Complete Warm-up.
- Read and complete pages in *Math in Focus 1B*.
- Complete pages in *Workbook 1B*.
- Complete Quick Check.

## LEARN

### WARM-UP

Look at this number bond.

![Number Bond](image)

To fill in the number bond, you have to think of three parts that add up to the whole of 10.

You could pick 1, 1, and 8, or you could pick 2, 2, and 6.

Draw the number bond on your paper 5 times. Show different ways you could fill in the number bond.

The whole is ten, and you are looking for three parts that make 10.

## TEACHING NOTES

### Warm-up Answers:

Check your student's work for accuracy. All 3 numbers should add up to 10.
**INSTRUCTION**

Today you will use number bonds to add three numbers.

Look at this problem:

\[ 9 + 4 + 3 = ? \]

You can use the make a ten strategy.

Use a number bond to rename 4 as 1 and 3.

\[ 9 + 1 = 10 \]

Once you have made a 10, you can add the other numbers.

\[ 3 + 3 = 6 \]

Then add 10 and 6.

\[ 10 + 6 = 16 \]

So, \( 9 + 4 + 3 = 16 \).

Look to see if there is more than one way to solve the problem.

**PRACTICE**

Read and complete pp. 119–122 in *Math in Focus 1B*. Then complete pp. 77–79 in *Workbook 1B*. 
Look at this problem:

\[ 9 + 4 + 3 = ? \]

You can use the make a ten strategy. Use a number bond to rename 4 as 1 and 3. Put the 1 with the 9 to make a ten.

\[ 9 + 1 = 10 \]

Once you have made a 10, you can add the other numbers.

\[ 3 + 3 = 6 \]

Then add 10 and 6.

\[ 10 + 6 = 16 \]

So, \( 9 + 4 + 3 = 16 \).

Look to see if there is more than one way to solve the problem.

Read and complete pp. 119–122 in Math in Focus 1B. Then complete pp. 77–79 in Workbook 1B.

Textbook Answer Key

Workbook Answer Key

Before your student begins to solve the problem, ask: What numbers make a ten? Encourage him to try solving each problem in different ways. Have him compare his answers to check for accuracy.

WRAP-UP

You can use the make a ten strategy to add three numbers.

\[ 4 + 8 + 1 = 13 \]

QUICK CHECK

Please go online to view and submit this assessment.

MORE TO EXPLORE

If you needed help with this question, use counters to show 1, 8, and 9, and then find how many in all.
Using Place Value to Add and Subtract - Part 7

Assignments
- Complete Interactive Activity
- Complete Rate Your Understanding.

LEARN

INTERACTIVE ACTIVITY

In these activities, you will learn about and practice adding and subtracting.

- BrainPop Jr: Adding and Subtracting Tens
- Easy Quiz
- Hard Quiz
- Catch It Game

RATE YOUR ENTHUSIASM

Please go online to view and submit this assessment.
**Using Place Value to Add and Subtract - Part 8**

**Objectives**
- Write an addition sentence for an everyday situation.
- Solve addition problems related to everyday situations.
- Write a subtraction sentence for an everyday situation.
- Solve subtraction problems related to everyday situations.

**Books & Materials**
- Math in Focus 1B
- Workbook 1B
- Math in Focus - Teacher Edition
- number cards 0–9
- connecting cubes
- Math Journal (Optional)

**Assignments**
- Complete Warm-Up.
- Read and complete pages in Math in Focus 1B.
- Complete pages in Workbook 1B.
- Complete Practice Questions.

---

**LEARN**

**WARM-UP**

Play Make a Ten with your Learning Guide.

1. Put the number cards face down on the table.
2. Draw 2 cards. If your cards add up to 10, you get a point.
3. Put the cards back and mix them up.

The first person to get 3 points is the winner.

---

**TEACHING NOTES**

Provide your student with number cards labeled 0–9.

**Warm-up Answers:**

Check your student's responses for accuracy.

---

**INSTRUCTION**

You have learned how to add and subtract 2-digit numbers. You can use what you know to solve real-world problems.
Addition Word Problems

Read this story problem:

Alex makes 16 muffins.
Brad makes 5 more muffins than Alex does.
How many muffins does Brad make?

Write an answer sentence that tells what you need to find out.

Brad makes _______ muffins.

Use connecting cubes to model the problem. Make a number train for each boy.

Alex makes 16 muffins, so make a number train with 16 cubes.

Brad makes 5 more muffins than Alex. Make a train using the same number of cubes as you did for Alex and add on 5 more.

Can you write a number sentence for this problem?

You know two parts: the 16 muffins that Alex makes and the 5 more that Brad makes. You want to find the whole: the total number of muffins that Brad makes.

Write a number sentence to show you are adding the two parts to find the whole.

\[ 16 + 5 = 21 \]

Now fill in your answer sentence.

Brad makes 21 muffins.

Subtraction Word Problems

Use your connecting cubes to model this problem:

Suzy collects 16 flowers. Elena collects 12 flowers.
How many more flowers does Suzy collect than Elena?

Write an answer sentence.

Suzy collects _______ more flowers than Elena.
Make 2 separate number trains for each girl.

Which train has more? How many more does it have?

Suzy's train is longer. It has 4 more cubes than Elena's train.

Write a number sentence. Subtract to compare the two numbers. Always start with the greater number.

\[ 16 - 12 = 4 \]

Fill in your answer sentence.

Suzy collects 4 more flowers than Elena.

---

**PRACTICE**

Read and complete pp. 123–127 and pp. 130–131 in *Math in Focus 1B*. Then complete pp. 79–82 in *Workbook 1B*.

---

**TEACHING NOTES**

- Textbook Answer Key
- Workbook Answer Key

Using the connecting cubes instead of looking for key words helps your student visualize the math problems. It is also practice for a strategy that he will learn next year called *bar modeling*.

Have your student model each word problem with connecting cubes. This will help him visualize each situation and also help him discover whether he needs to add or subtract to find the solution.

---

**ENRICHMENT**

In your Math Journal, write your own real-world addition and subtraction problems. Use connecting cubes to solve.

Look around your home or think of things you do with your family to get ideas. If you like the beach, you can write a problem about collecting seashells. You can draw pictures to illustrate the problems.
**WRAP-UP**

You can add or subtract to compare numbers in real-world problems. Model the problem with connecting cubes.

Kamal has 17 model cars. Ty has 9 fewer cars than Kamal. How many cars does Ty have?

Write an answer sentence.

Ty has _______ model cars.

Write a number sentence with the whole, 17, and one part, 9. Then fill in the answer sentence.

\[17 - 9 = 8\]

Alex has 8 model cars.

**PRACTICE QUESTIONS**

Please go online to view and submit this assessment.
Using Place Value to Add and Subtract - Part 9

**Objectives**
- Use the guess-and-check method to solve a problem.
- Use logical deduction to solve a problem.

**Books & Materials**
- Math in Focus 1B
- Workbook 1B
- Math in Focus - Teacher Edition
- connecting cubes
- index cards

**Assignments**
- Complete Warm-Up.
- Complete Put On Your Thinking Cap! in Math in Focus 1B.
- Complete pages in Workbook 1B.
- Complete Practice Questions.

---

**LEARN**

**WARM-UP**

Use the make a ten strategy to add each set of numbers.

1. $9 + 3 + 8 = ?$
2. $4 + 7 + 5 = ?$
3. $6 + 8 + 4 = ?$

**TEACHING NOTES**

Have your student explain his reasoning as he solves each problem. Encourage him to try solving each problem in different ways.

**Warm-up Answers:**

1. 20
2. 16
3. 18

**INSTRUCTION**

Complete Put On Your Thinking Cap! on p. 131 in Math in Focus 1B.
**TEACHING NOTES**

**Workbook Answer Key**

Read the directions to Put On Your Thinking Cap! on p. 131 in Math in Focus 1B with your student. Ask: What do you need to find out? (three numbers that add up to 12) What can you do to help you solve the problem? He may want to write the given numbers on index cards and arrange them to find groups of three numbers that equal 12. He may want to use connecting cubes to model the problems, or he may prefer to guess and check.

Guide him through the process of finding a solution, but allow him to be as independent as he is able. Remind him that he can use the make a ten strategy to help him add sets of three numbers. Guide him as he discovers that 2 + 3 + 7, 2 + 4 + 6, and 3 + 4 + 5 all equal 12.

---

**PRACTICE**

Complete pp. 83–86 in Workbook 1B.

---

**TEACHING NOTES**

**Workbook Answer Key**

**Page 83**

Look at p. 83 in Workbook 1B together. For the first problem, your student will choose 3 numbers that have a sum of 8. He may want to use manipulatives to act out the problem or use the guess-and-check strategy. Point out that he already knows two out of the three numbers. He may choose to add those two numbers together and then subtract from 8, or subtract each number from 8 one at a time. Encourage your student to try solving the second problem on p. 83 using a different strategy. Guide him as he discovers that 1 + 4 + 3, 3 + 0 + 5, and 5 + 2 + 1 all equal 8, and 1 + 6 + 3, 3 + 2 + 5, and 5 + 4 + 1 all equal 10.

**Pages 84–85**

Read the directions on p. 84 with your student. Explain that the picture he sees is a number machine. The number 9 goes into the machine. While it is in the machine, a number is added to it, and then a number is subtracted. Then the number 27 comes out. Say: Choose a number to write under Add and another number to write under Subtract. Have him solve the math sentence he just created. For example, if he writes 2 for the Add number and 3 for the Subtract number, he will write 9 + 2 = 11 and then 11 − 3 = 8. Eight is not 27, so he will need to go back and guess different numbers.

Ask: Do you think you should try greater numbers or lesser numbers this time? Guide your student with similar questions so that he guesses in a logical manner. Have him use similar strategies to solve the problem on p. 85.
Page 86
Read p. 86 with your student. He may find it helpful to write the names of the rides and ticket amounts on index cards. He can then rearrange the cards to visualize each addition sentence. If he uses a different strategy to solve, allow him to do so as long as he can explain his reasoning.

WRAP-UP
Today, you used what you know about adding and subtracting to solve word problems. You also added groups of 3 numbers.

You used the guess-and-check strategy, the make a ten strategy, or a strategy of your own to find solutions to different types of problems.

✔ PRACTICE QUESTIONS
Please go online to view and submit this assessment.
USE FOR MASTERY

Tina makes 17 bracelets.
Clarissa makes 18 more bracelets than Tina.
How many bracelets did Clarissa make?
Clarissa makes ____ bracelets.

Tell how you got your answer.
USE FOR MASTERY GUIDELINES & RUBRIC

Did you:

- Show how many more bracelets Clarissa made than Tina?
- Tell how you got your answer? Show an equation.
LEARN

Warm-up Answers:
1. 7, 5, 2, 2
2. 9, 3, 3, 6

INSTRUCTION

Number Bonds

You know how to draw number bonds. Number bonds have one whole and two or more parts. You can break a whole into different sets of parts.
Can you draw different number bonds using 10 as the whole?

In this lesson, help your student to focus on the patterns she sees when she makes a ten or uses doubles. In this chapter your student will be doing mental math. Practice several number bonds with her so she is comfortable using them as she begins to learn how to mentally use the strategy to do math problems in her head. Allow your student to use manipulatives, as needed, to reinforce the concepts in this lesson.

You may find it helpful to view the following video:

Instructional Support Video: How to Teach Number Bonds in Mental Math 1

Read and complete pp. 134–137 in Math in Focus 1B.

Textbook Answer Key

A number bond shows a whole and its parts.

Please go online to view and submit this assessment.
Mental Math - Part 2

Objectives
- Add by using the strategies of doubles facts and doubles plus one.
- Add mentally by adding ones and tens.

Books & Materials
- Math in Focus 1B
- Workbook 1B
- Math in Focus - Teacher Edition
- connecting cubes or base-ten blocks (Optional)
- set of dominoes (Optional)

Assignments
- Complete Warm-Up.
- Read and complete pages in Math in Focus 1B.
- Complete pages in Workbook 1B.
- Complete Practice Questions.

LEARN

WARM-UP

Play the Make the Next Ten game.

Your Learning Guide will say a number. Say how far that number is from the next ten.

For example, if your Learning Guide says 15, you say 5 because 15 + 5 = 20. Twenty is the next ten after 15.

TEACHING NOTES

Say a number between 0 and 40. Have your student say how far that number is from the next ten. If necessary, allow your student to use connecting cubes or base-ten blocks to model your number in tens and ones. Ask: How many more connecting cubes do you need to be able to make another group of ten?

You may find it helpful to view the following video:

Instructional Support Video: What Is Mental Math and Why Is It Important?

Warm-up Answers:

Check your student’s responses for accuracy.

INSTRUCTION

Today, you will learn some strategies to help you add mentally. When you mentally solve a problem, you only use your head. You do not need cubes or blocks or even paper.
You know that a doubles fact has two of the same number. Knowing your doubles facts will help you add other problems **mentally**.

### TEACHING NOTES

With each **Learn** section, read through the steps with your student. If she still has some difficulty working through the **Guided Practice** problems, write down additional problems for her to practice.

The strategies in this lesson are just some of the ways your student can use mental math to solve addition problems. If your student sees a different way to solve the problems, allow her to use her method as long as she is arriving at the answer in a logical manner. The **doubles** and the **doubles plus one** strategies will help your student solve more challenging problems in later lessons. Practice these strategies until your student is comfortable mentally solving problems using the strategies.

### PRACTICE

Read and complete **pp. 138–140** in **Math in Focus 1B**. Then complete **pp. 99–100** in **Workbook 1B**.

### TEACHING NOTES

- **Textbook Answer Key**
- **Workbook Answer Key**

### WRAP-UP

You can use **doubles facts** and **doubles plus one facts** to add mentally.

\[ 8 + 9 = 17 \]

You can add mentally by **adding the ones**.

\[ 10 + 9 = 19, \text{ so } 12 + 7 = 19. \]

You can add mentally by **adding the tens**.

\[ 30 + 8 = 38, \text{ so } 18 + 20 = 38. \]
SUPPLEMENTAL
- BrainPOP Jr: Doubles

PRACTICE QUESTIONS
Please go online to view and submit this assessment.
**Mental Math - Part 3**

**LEARN**

**WARM-UP**

Say the answer to each doubles fact as quickly as you can.

1. 3 + 3  
2. 6 + 6  
3. 4 + 4  
4. 8 + 8  
5. 9 + 9  
6. 2 + 2  
7. 1 + 1  
8. 5 + 5  
9. 7 + 7

**TEACHING NOTES**

Write the doubles facts on index cards to make flash cards. Show your student a fact and have her say the answer as quickly as possible. It is important to be comfortable with basic math facts in order to solve problems mentally.

**Warm-up Answers:**

1. 6  
2. 12  
3. 8  
4. 16  
5. 18

**Objectives**

- Add by using the strategies of doubles facts and doubles facts plus one.
- Add mentally by adding ones and ten.

**Books & Materials**

- Math in Focus 1B
- Workbook 1B
- Math in Focus - Teacher Edition
- index cards with doubles facts (Optional)
- two sets of number cards (4–9 and 6–9)

**Assignments**

- Complete Warm-Up.
- Read and complete pages in *Math in Focus 1B*.
- Complete pages in *Workbook 1B*.
- Complete Quick Check.
Today you will practice the mental math strategies you learned. When solving a problem, choose a strategy you think will work best.

While playing the Add Mentally! game on p. 141 in Math in Focus 1B, have your student explain which strategy she was using to mentally add the numbers. When it is your turn, mentally solve your problem out loud using one of the strategies that she has been taught. Listening to you think out loud will help her see what she should be thinking when solving a problem.

If your student uses a different strategy to solve problems other than the ones she has learned, have her teach the strategy to you. If it is logical, use it on your next turn. This will also help her remember this strategy.

Read and complete pp. 141–142 in Math in Focus 1B. Then complete pp. 101–102 in Workbook 1B.

You know many strategies to help you mentally solve addition problems.

- You can use doubles facts.
- You can use doubles plus one.
- You can add the ones.
- You can add the tens.
Please go online to view and submit this assessment.

If you needed help with this question, use base-ten blocks to model the problem. Remember that you are adding a ten.
WARM-UP
Use 10 connecting cubes to answer the following questions:

1. How many different ways can you make the number 10 with two parts? Write the different ways.
2. Make a number train with the cubes. How many ways can you break apart the number train of 10 into two parts? Write the different ways.
3. What is the same about making 10 and breaking apart 10?

BEGIN WITH 10 CONNECTING CUBES. ASK YOUR STUDENT TO MAKE THE NUMBER 10 WITH TWO PARTS. TRY TO GET HER TO THINK SYSTEMATICALLY SO THAT SHE FINDS ALL THE COMBINATIONS. (5 AND 5; 4 AND 6; 3 AND 7; 2 AND 8; 9 AND 1; AND 0 AND 10)

GUIDE YOUR STUDENT TO SEE THAT MAKING BEGINS WITH PARTS AND ENDS UP WITH WHOLES, WHILE BREAKING STARTS WITH THE WHOLE AND ENDS UP WITH PARTS.

IF YOUR STUDENT CAN EASILY FIND GROUPS OF TWO NUMBERS THAT MAKE 10, ENCOURAGE HER TO TRY MAKING AND BREAKING 10 USING THREE OR MORE PARTS. HAVE HER EXPLAIN WHETHER SHE IS STARTING WITH PARTS OR THE WHOLE.

WARM-UP ANSWERS:

CHECK YOUR STUDENT’S RESPONSES FOR ACCURACY.

INSTRUCTION
You have used number bonds to help you mentally solve addition problems. You can also use number bonds to help you mentally solve subtraction problems.
Have your student draw number bonds to use each strategy as long as necessary. If she is able to mentally solve each problem without drawing number bonds, have her explain her reasoning as she works through each step.

**PRACTICE**

Read and complete pp. 143-146 in *Math in Focus 1B*.

**WRAP-UP**

You can use a number bond to subtract mentally.

You can subtract mentally by **subtracting the ones**.
You can subtract mentally by **subtracting the tens**.

![Number bonds diagram]

### QUICK CHECK

Please go online to view and submit this assessment.

### MORE TO EXPLORE

If you had difficulty with this problem, consider the difference between subtracting 1 and subtracting 10. Then show 21 using base-ten blocks, and then circle a ten to show how much is being taken away.
Mental Math - Part 5

Assignments
- Complete Interactive Activity
- Complete Rate Your Enthusiasm.

LEARN

INTERACTIVE ACTIVITY

Play this game to help you with mental math.

The frog is hungry for his favorite food – flies! You can help the frog catch flies by giving him directions.

Here is an example. The frog is sitting at 15 on the number line. There are flies at 9, 25, and 27. Help the frog catch the fly at 25.

First decide if you have to add or subtract. In this case, you have to add because 25 is greater than 15.

Then decide how many you have to add. You have to add 10 to get from 15 to 25. Change Jump size to 10. Then click Add. See the frog jump to catch the fly! You will also see the math sentence on the screen.

Now try to catch the fly at 9. You are going backward on the number line, so you have to subtract. How many spaces do you need to go to catch the fly? 25 – 9 = 16, so set Jump size to 16 and click Subtract. Watch the frog catch the fly and the number sentence appear on the screen.

Catch the fly at 27. Then click Add fly to make another fly appear. Keep adding flies and feeding your hungry frog!

TEACHING NOTES

Assist your student as needed through the game. Encourage him to compute mentally as he helps the frog catch the flies. Have him continue to add flies to get an adequate amount of practice.
You learned some strategies for mental math.

You learned how to:

- use a number bond
- make a ten
- use doubles and doubles plus one
- work with ones and tens

Think about these strategies as you work this problem.

**USE FOR MASTERY**

1. There are 26 crayons in a box. You take out 10 crayons. How many are left? Explain how you can use mental math to find the answer.
### Adding and Subtracting to 100 - Part 1

#### Objectives
- Add 2-digit numbers without regrouping.
- Add 2-digit numbers with regrouping.
- Subtract 2-digit numbers without regrouping.
- Subtract 2-digit numbers with regrouping.

#### Books & Materials
- Math in Focus 1B
- Math in Focus - Teacher Edition
- base-ten blocks
- place-value charts

#### Assignments
- Complete Warm-up.
- Read and complete pages in Math in Focus 1B.
- Complete Practice Questions.

---

#### LEARN

#### WARM-UP

Write a number sentence for each problem. Then solve the problem.

1. You read 5 pages of a book yesterday. Today you read 9 pages. How many pages did you read in all?
2. Your mother bought 20 balloons for a party. Three balloons popped. How many balloons were left?

Encourage your student to solve these problems mentally, but if he needs to write them down or use manipulatives, let him do so.

**Warm-up Answers:**

1. $5 + 9 = 14$; 14 pages
2. $20 - 3 = 17$; 17 balloons

---
INSTRUCTION

Look at the picture on p. 216 in Math in Focus 1B. The farmer starts with 78 ducklings. Then, 50 ducklings run away. He tells you that he has 28 ducklings left. To find that out, he subtracted.

\[ 78 - 50 = 28 \]

In this chapter, you will learn to add and subtract numbers up to 100. There are many strategies that will help you learn this skill.

TEACHING NOTES

Review each skill with your student. If he has difficulty with any of the strategies, create additional number sentences for him to use to practice the skill.

PRACTICE

Read and complete pp. 216–220 in Math in Focus 1B.

TEACHING NOTES

Textbook Answer Key

WRAP-UP

Place Value

You can write numbers in place-value form.

\[
\begin{array}{c|c}
\text{Tens} & \text{Ones} \\
8 & 1 \\
\end{array}
\]
Adding Numbers

Sometimes you must regroup when you add two numbers.

\[
\begin{array}{c|c}
\text{Tens} & \text{Ones} \\
\hline
1 & \\
2 & 5 \\
\hline
+ & 18 \\
\hline
43 & \\
\end{array}
\]

Subtracting Numbers

Sometimes you must regroup when you subtract.

\[
\begin{array}{c|c}
\text{Tens} & \text{Ones} \\
\hline
3 & 12 \\
\hline
42 & \\
\hline
- & 15 \\
\hline
27 & \\
\end{array}
\]

Related Facts

You can use related facts to check your answer when you solve problems.

If 45 – 21 = 24, then 24 + 21 will equal 45.

\[
\begin{array}{c|c}
\text{Tens} & \text{Ones} \\
\hline
2 & 4 \\
\hline
+ & 21 \\
\hline
45 & \\
\end{array}
\]

The answer is correct.

✅ PRACTICE QUESTIONS

Please go online to view and submit this assessment.
LEARN

WARM-UP

Mental Math

Use mental math to solve these addition problems.

1. 2 + 8 = _______
2. 12 + 8 = _______
3. 22 + 18 = _______
4. 8 + 2 = _______
5. 18 + 2 = _______
6. 28 + 12 = _______

TEACHING NOTES

If your student does not catch it, ask if he sees a pattern in these problems. He should note that all the problems added 8 and 2 in the ones column. He may notice that the first three problems used the addition fact 2 + 8, and the second three problems used the related addition fact, 8 + 2.

Warm-up Answers:

1. 10
2. 20
3. 40
4. 10
5. 20
6. 40
In this lesson, you will add numbers greater than 40.

Just like with smaller numbers, you can use different strategies like counting on, using number lines, and place-value charts. When adding, be sure to start with the ones place in case you have to regroup to make a ten.

When counting on, your student can use his fingers to keep track of each number he has counted. This helps remind him when to stop. Also, remember that practicing all of these strategies is reinforcement for adding and subtracting without regrouping. So continue to have your student work through problems using each of the strategies.

Read and complete pp. 221–227 in Math in Focus 1B. Then complete pp. 161–164 in Workbook 1B.

Adding with a Number Line

You can use a number line to add.

52 + 6 = ?

Start at 52 and count on 6 more.

52 + 6 = 58
Adding Ones

You can use a place-value chart to add ones.

\[
\begin{array}{c|c|c|c|c}
\text{Tens} & \text{Ones} \\
\hline
\text{Tens Ones} & 5 & 3 \\
\hline
\text{Add the ones.} & 6 & 8 \\
\end{array}
\]

Adding Tens

The ones stay the same because \(2 + 0 = 2\).

\[
\begin{array}{c|c|c|c|c}
\text{Tens} & \text{Ones} \\
\hline
\text{Tens Ones} & 3 & 2 \\
\hline
\text{Then add the tens.} & 4 & 0 \\
\hline
\text{3 tens + 4 tens} & 7 & 2 \\
\end{array}
\]

You can also count on by tens to add:

\[32, 42, 52, 62, 72\]

Adding Ones and Tens

First add the ones.

\[
\begin{array}{c|c|c|c|c}
\text{Tens} & \text{Ones} \\
\hline
\text{Tens Ones} & 5 & 3 \\
\hline
\text{3 + 1 = 4} & + & 3 & 1 \\
\hline
\text{Then add the tens.} & 8 & 4 \\
\end{array}
\]

\[5 \text{ tens} + 3 \text{ tens} = 8 \text{ tens} \]

\[53 + 31 = 84\]
Quick Check

Please go online to view and submit this assessment.

More to Explore

In this part, you learned how to add numbers up to 100. Try one of these interactive tools to practice this skill.

120 Number Board

- Find the first number you are adding on the board.
- Move right to add the ones. You might have to keep going to the next row.
- Move straight down to add the tens.

100-Bead Rekenrek

- Each row of beads stands for a ten. Use as many rows as you need to show your first number.
- Add the ones first. Move the beads one at a time. You may need to add beads from the next row if you do not have enough.
- Add the tens next. Use a whole row of beads for each ten.

Teaching Notes

Assist your student as needed with the interactive tools. Allow exploration with the manipulatives while encouraging the student to "think aloud" as she uses them.
Adding and Subtracting to 100 - Part 3

**Objectives**
- Add 2-digit numbers with regrouping.
- Use models to demonstrate mathematical concepts and/or solve problems.

**Books & Materials**
- Math in Focus 1B
- Workbook 1B
- base-ten blocks
- place-value charts
- place-value mat

**Assignments**
- Complete Warm-Up.
- Read and complete pages in *Math in Focus 1B*.
- Complete pages in *Workbook 1B*.
- Complete Quick Check.

---

**LEARN**

**WARM-UP**

Write a number sentence and solve this problem.

Anna will stay with her grandmother during June and July. There are 30 days in June. There are 31 days in July. How many days she will stay with her grandmother in all?

**TEACHING NOTES**

Warm-up Answer:

30 + 31 = 61; Anna will stay with her grandmother for 61 days.

**INSTRUCTION**

Today, you will use regrouping to add numbers greater than 40.

**Practicing Addition**

Solve: 54 + 9 = ?

Show the numbers 54 and 9 with your base-ten blocks.

Write the addition sentence in place-value form.
Add the ones first.

4 ones + 9 ones = 13 ones

What do you need to do with the 13 ones?

Regroup the 13 ones into 1 ten and 3 ones.

Write the 3 under the line in the ones column.
Add the 1 ten to the tens column.

Now add the tens.

1 ten + 5 tens = 6 tens
6 tens 3 ones = 63, so
54 + 9 = 63.

**PRACTICE**

Read and complete pp. 228-229 in *Math in Focus 1B*. Then complete pp. 165–166 in *Workbook 1B*.

**TEACHING NOTES**

- [Textbook Answer Key](#)
- [Workbook Answer Key](#)

**WRAP-UP**

In this lesson, you used place value to add ones to a 2-digit number.

28 + 7 = ?
Please go online to view and submit this assessment.

If you had difficulty with this question, use models until you are comfortable.
LEARN

WARM-UP

Mental Math

1. What is 25 + 3?
2. What is 67 + 2?
3. What is 15 + 20?
4. What is 35 + 30?

Warm-up Answers:
1. 28
2. 69
3. 35
4. 65

TEACHING NOTES

Encourage your student to use mental math strategies to solve these problems. If he has difficulty determining a strategy to use, point out that problems 1 and 2 add ones, so the add the ones strategy is probably best. Since problems 3 and 4 add groups of tens, he can use the add the tens strategy.

INSTRUCTION

You have been adding 2-digit numbers. Today you will learn more about adding with regrouping.

Adding Ones and Tens

Solve: 15 + 37 = ?
Use base-ten blocks to make 15 and 37. Set the blocks on a place-value chart.

Regroup the 12 unit cubes as 1 ten-rod and 2 unit cubes. In the place-value form, 12 is more than 9 so you need to regroup.

Move the ten-rod to the tens column of the place-value chart.

Now you can add the tens.

\[1 \text{ ten} + 1 \text{ ten} + 3 \text{ tens} = 5 \text{ tens}\]

You have 5 tens and 2 ones.

\[5 \text{ tens} + 2 \text{ tens} = 52, \text{ so } 15 + 37 = 52.\]

**TIP**
When you regroup, write the little 1 in the tens column right away so that you do not forget about it when you add the tens.
As your student gains confidence adding with regrouping, encourage him to move from using the base-ten blocks to solving the problems completely with place-value form. Allow him to use the base-ten blocks, however, if he needs additional practice visualizing the problems as he solves them.

Read and complete pp. 231–233 in *Math in Focus 1B*. Then complete pp. 167–170 in *Workbook 1B*.

**Tip:** If your student has difficulty aligning the problems when he copies them from the book, provide lined paper turned sideways. He can use the vertical lines to form tens and ones columns.

You can add 2-digit numbers with regrouping.

**Adding Ones and Tens**

\[ 35 + 45 = ? \]

You can use base-ten blocks and a place-value chart to model the problem.

Please go online to view and submit this assessment.
Adding and Subtracting to 100 - Part 5

**Objectives**
- Subtract 2-digit numbers without regrouping.
- Explain the procedure for subtracting multiples of ten.

**Books & Materials**
- Math in Focus 1B
- Workbook 1B
- *Math in Focus - Teacher Edition*
- base-ten blocks
- place-value charts
- place-value mat

**Assignments**
- Complete Warm-up.
- Read and complete pages in *Math in Focus 1B*.
- Complete pages in *Workbook 1B*.
- Complete Use For Mastery.

---

**LEARN**

---

**WARM-UP**

1. Count backward by 5s from 50.
2. Count backward by 10s from 90.

---

**TEACHING NOTES**

**Warm-up Answers:**

Check your student's responses for accuracy.

---

**INSTRUCTION**

You have subtracted 2-digit numbers less than 40. Today, you will use what you know to begin subtracting numbers greater than 40.

**Subtracting Ones and Tens**

*Solve: 48 – 25 = ?*

Make the number 48 with your base-ten blocks and put them on the chart.

![Base-ten blocks diagram](chart.png)
First take away the ones. Then take away the tens.

\[ 8 \text{ ones} - 5 \text{ ones} = 3 \text{ ones} \]
\[ 4 \text{ tens} - 2 \text{ tens} = 2 \text{ tens} \]

You have 2 tens and 3 ones.

\[ 48 - 25 = 23 \]

**Checking Your Work**

Can you use a related addition fact to check your work? If \(48 - 25 = 23\), then \(23 + 25\) should equal 48.

The answer is correct.

When subtracting the ones and the tens, make sure your student is using the skills he learned while subtracting just the one and just the tens. Make sure he is focused on one step at a time. Remind him to always start with the ones in case the problem requires regrouping. Have your student practice each skill when solving different problems.

**PRACTICE**

Read and complete pp. 234–241 in *Math in Focus 1B*. Then complete pp. 171–174 in *Workbook 1B*.

**TEACHING NOTES**

- Textbook Answer Key
- Workbook Answer Key
WRAP-UP

Subtracting Ones and Tens

Subtract the ones first.

\[
6 - 2 = 4
\]

Subtract the tens.

\[
\begin{array}{c}
36 \\
- 22 \\
\hline
14
\end{array}
\]

USE

USE FOR MASTERY

There are 54 children at a theme park.
Another 27 children enter the theme park.
How many children are at the theme park now?

Fill in the blanks.

\[
54 \underline{\quad} 27 = \underline{\quad}
\]

\[
\text{children are at the theme park now.}
\]
USE FOR MASTERY GUIDELINES & RUBRIC

Did you:

- Provide the correct missing pieces of the equation?
- Show how many total children are at the theme park?
- Show and tell how you got to your answer?
Unit Quiz: Working with Two-Digit Numbers

Books & Materials
- Math in Focus - Teacher Edition

UNIT QUIZ

Please go online to view and submit this assessment.
Appendix
This form is to be used when completing Use for Mastery assessments or Projects offline. Your assessment can then be scanned and uploaded into the correct lesson online.

Please Fill In This Form Completely

Student's Name

Grade

Course Name

Lesson Title

Provide your answer in the space below.
**Biography of a Number**

**Student Facing Project Rubric**

Read the chart below to understand how your project will be scored. Your goal should be to earn all 20 possible points.

<table>
<thead>
<tr>
<th>CRITERIA</th>
<th>4 POINTS</th>
<th>3 POINTS</th>
<th>2 POINTS</th>
<th>1 POINT</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Book Design and Final Presentation</strong></td>
<td>Your book has ten or more pages. Your cover includes a title and a colorful picture related to your story. When sharing your story, reading shows a clear understanding of what you wrote.</td>
<td>Your book has ten or more pages. Your cover includes a title and a picture related to your story. When sharing your story, reading shows a clear understanding of what you wrote.</td>
<td>Your book has ten or more pages. Your cover includes a title and a colorful picture related to your story. Your reading shows that you understand most of the book, but you are unsure on some of the topics.</td>
<td>Your cover has less than ten pages. Your cover includes a title, but there is no picture. Your reading shows that you understand most of the book, but you are unsure on some of the topics.</td>
</tr>
<tr>
<td><strong>Making Ten</strong></td>
<td>The first page of your story correctly tells a way a way to make ten in words. You have included a number bond that matches the way that you show ten.</td>
<td>The first page of your story tells a way a way to make ten in words. You have also included a number bond that shows a way to make ten. The story and the number bond do not match.</td>
<td>The first page of your story correctly tells a way to make ten in words, but you did not create a matching number bond, or your story shows a correct way to make ten using a number bond, but you forgot to write it in words.</td>
<td>The first page of your story tells an incorrect way to make ten in words, and you did not create a matching number bond, or your story shows an incorrect way to make ten using a number bond, but you forgot to write it in words.</td>
</tr>
<tr>
<td><strong>Number Stories</strong></td>
<td>Your story includes three correct stories about ten. At least one tells an addition story and at least one includes a subtraction story. Each story includes words that tell what ten is doing, a number sentence, and a colorful picture to show your work.</td>
<td>Your story includes three correct stories about ten. At least one tells an addition story and at least one includes a subtraction story. Each story is missing at least one of the following: words that tell what ten is doing, a number sentence, and a colorful picture to show your work.</td>
<td>Your story includes at least two correct stories about ten. At least one tells an addition story and at least one includes a subtraction story. Each story includes words that tell what ten is doing, a number sentence, and a colorful picture to show your work.</td>
<td>Your story includes at least two correct stories about ten. At least one tells an addition story and at least one includes a subtraction story. Each story is missing at least one of the following: words that tell what ten is doing, a number sentence, and a colorful picture to show your work.</td>
</tr>
<tr>
<td><strong>Fact Families</strong></td>
<td>Your book shows a fact family for ten. This should include two correct addition sentences and two correct subtraction sentences all using the same numbers.</td>
<td>Your book shows a fact family for ten. This should include two addition sentences and two subtraction sentences all using the same numbers. There is at least one error.</td>
<td>Your book shows a fact family for ten. This should include two addition sentences and two subtraction sentences all using the same numbers. There are at least two errors.</td>
<td>Your book shows a fact family for ten. This should include two addition sentences and two subtraction sentences all using the same numbers, but you are missing at least one equation. There is at least two errors.</td>
</tr>
<tr>
<td><strong>Double Facts</strong></td>
<td>Your story includes one double fact family. The page should include a story and a picture telling what ten sees. On the next page there is the fact family for these numbers. For Task #6, you explained why this fact family has fewer sentences than the other fact families.</td>
<td>Your story includes one double fact family. The page should include a story and a picture telling what ten sees. On the next page there is the fact family for these numbers. For Task #6, you did not explain why this fact family has fewer sentences than the other fact families.</td>
<td>Your story includes one double fact family. The page should include a story and a picture telling what ten sees. You did not include the fact family for these numbers. For Task #6, you explained why this fact family has fewer sentences than the other fact families.</td>
<td>Your story includes one double fact family. The page should include a story and a picture telling what ten sees, but there are some details missing. You did not include the fact family for these numbers. For Task #6, you did not explain why this fact family has fewer sentences than the other fact families.</td>
</tr>
</tbody>
</table>

**Total Possible Points: 20**
### ATS Test Lesson Submission Schedule

**Grade 1 Calvert Math in Focus**

**Appendix 476**

**Shadow Clock**

**Student Facing Project Rubric**

Read the chart below to understand how your project will be scored. Your goal should be to earn all 20 possible points.

<table>
<thead>
<tr>
<th>CRITERIA</th>
<th>1 POINT</th>
<th>2 POINTS</th>
<th>3 POINTS</th>
<th>4 POINTS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Comparing Length</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>You posted a picture of the three sticks labeling each one A, B, and C. You correctly stated which stick is the longest and which stick is the shortest. Predict which you think will create the longest shadow.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>You posted a picture of the three sticks labeling each one A, B, and C. You correctly stated which stick is the longest and which stick is the shortest. You did not make a prediction telling what you think will create the longest shadow.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>You posted a picture of the three sticks labeling each one A, B, and C. You made an error in stating which is the longest or which is the shortest. You did not make a prediction telling what you think will create the longest shadow.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>You posted a picture of the three sticks labeling each one A, B, and C. You made an error in stating which is the longest and which is the shortest. You did not make a prediction telling what you think will create the longest shadow.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Measuring Length</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>You measured the stick using two different items. You shared pictures measuring the stick with each item. You correctly completed the sentences to tell how many items long the stick is for both items. You correctly explained why the number of items long the stick is different for both measurements.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>You measured the stick using two different items. You shared pictures measuring the stick with each item. You correctly completed the sentences to tell how many items long the stick is for both items. You stated the difference between the number of items long the stick is, but you did not explain why the measurement is different.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>You measured the stick using two different items. You did not share pictures measuring the stick with each item. You correctly completed the sentences to tell how many items long the stick is for both items. You stated the difference between the number of items long the stick is, but you did not explain why the measurement is different.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>You measured the stick using two different items. You did not share pictures measuring the stick with each item. You completed the sentences to tell how many items long the stick is for both items, but made some errors. You stated the difference between the number of items long the stick is, but you did not explain why the measurement is different.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Telling Time</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>You correctly wrote the four times that you gathered data on an analog clock as well as a digital clock.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>You wrote the four times that you gathered data on an analog clock as well as a digital clock, but you made 1–3 errors.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>You wrote the four times that you gathered data on the analog or digital clock, but you wrote the times on the other clocks incorrectly.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>You either did not write the four times that you gathered data on an analog clock as well as a digital clock, or you did not complete all of the clocks.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Chart and Graph</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>You correctly wrote in the times as well as the lengths of the shadow at each time in the chart. The graph you created displays this information accurately.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>You wrote in the times as well as the lengths of the shadow at each time in your chart, although you made one or two errors. The graph you created displays this information accurately.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>You wrote in the times as well as the lengths of the shadow at each time in your chart. You also created a graph, but it does not properly display the information in your chart.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>You either did not write in the times as well as the lengths of the shadow at each time in your chart, or you did not create a chart.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Conclusion</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>You correctly explained how the length of the shadow relates to the time of day that it is measured, which matches your table and graph.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>You explained how the length of the shadow relates to the time of day that it is measured, which does not match your table and graph.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>You correctly explained how the length of the shadow relates to the time of day that it is measured, which does not match your table and graph.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>You either did not explain how the length of the shadow relates to the time of day, or you did not create a table and graph.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Total Possible Points: 20**

Calvert Learning • Grade 1 Math in Focus • Unit 3
Cake Bakery
Student Facing Project Rubric

Read the chart below to understand how your project will be scored. Your goal should be to earn all 20 possible points.

<table>
<thead>
<tr>
<th>CRITERIA</th>
<th>4 POINTS</th>
<th>3 POINTS</th>
<th>2 POINTS</th>
<th>1 POINT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tangram Design</td>
<td>Your decoration includes at least eight different tangrams. You created a design for your cake using at least three different types of shapes.</td>
<td>Your decoration includes at least five different tangrams. You created a design for your cake using at least three different types of shapes. You have correctly named all of your shapes.</td>
<td>Your decoration includes at least three different tangrams. You created a design for your cake using at least three different types of shapes. You have correctly named at least two of your shapes.</td>
<td>Your decoration includes at least three different tangrams. You created a design for your cake using at least three different types of shapes. You have correctly named at least one of your shapes.</td>
</tr>
<tr>
<td>Cake Shape</td>
<td>Your cake is made from at least three solid shape cakes, which you have correctly named. The cake is decorated and colorful.</td>
<td>Your cake is made from at least three solid shape cakes, which you have correctly named. The cake is not decorated.</td>
<td>Your cake is made from at least two solid shape cakes, which you have correctly named. The cake is decorated and colorful.</td>
<td>Your cake is made from at least two solid shape cakes, which you have correctly named. The cake is not decorated.</td>
</tr>
<tr>
<td>Cutting Cake</td>
<td>You correctly divided the cake into halves and quarters. You shaded exactly one half and one quarter to show the amount that you are selling.</td>
<td>You correctly divided the cake into halves and quarters. You made an error shading one half or one quarter to show the amount that you are selling.</td>
<td>You correctly divided the cake into halves and quarters. You incorrectly shaded the part that you would sell.</td>
<td>You made an error dividing the cake into halves and quarters.</td>
</tr>
<tr>
<td>Advertisement</td>
<td>Your advertisement includes a picture of your cake, the name of your bakery. Your cake has been decorated with your tangram design.</td>
<td>Your advertisement includes a picture of your cake. Your cake has been decorated with your tangram design.</td>
<td>Your advertisement includes a picture of your cake, and the name of your bakery.</td>
<td>Your advertisement includes a picture of your cake.</td>
</tr>
<tr>
<td>Neatness and Creativity</td>
<td>Your work is neatly done. All of the lines around your shapes are straight. Your cake has a theme, and at least five different colors have been used in your design.</td>
<td>Your work is neatly done. All of the lines around your shapes are straight. Your cake has a theme, and at least three different colors have been used in your design.</td>
<td>Your work is neatly done. All of the lines around your shapes are straight. At least five different colors have been used in your design.</td>
<td>Your work is neatly done. Your cake has a theme, and at least three different colors have been used in your design.</td>
</tr>
</tbody>
</table>

Total Possible Points: 20
Word Form Worksheet

0 zero  zero
1 one  one
2 two  two
3 three  three
4 four  four
5 five  five
6 six  six
7 seven  seven
8 eight  eight
9 nine  nine
10 ten  ten
Numbers to 120 Worksheet

1. What number do each of the following sets of base-ten blocks show?

   a. 
   b. 
   c. 

2. Write the number that comes next.
   
   a. 104 ____
   b. 107 ____
   c. 109 ____
   d. 113 ____
   e. 119 ____

   Fill in the missing numbers.
   
   100, _____, 102, 103, 104, _____, 106, _____, 108, 109, _____, 111, 112, _____, 114, 115, _____, 117, _____, 119, _____

3. Write the following numbers in words.

   a. 102 ______________________________
   b. 108 ______________________________
   c. 110 ______________________________
   d. 115 ______________________________
   e. 120 ______________________________
Shadow Clock - Part 3 Worksheet

Time 1

Time 2

Time 3

Time 4
Tangram Plane Shapes

Cut out the shapes to use the Tangram