

5) If your shoe length is 60 percent of a college basketball player's shoe length, how long is his/her shoe?

6) What percent of 35 is 13?

7) If the length from your elbow to your fingertip were increased 50%, how long would it be?



Using The Elastic Percent Ruler

Directions: Use your EPR and a ruler or meter stick to find approximate answers to the following questions. **Draw a picture for each situation.** Note: it does not matter if you use the CM or inches on the ruler/meter stick.

1. Jose correctly answered 30 of 35 questions on his test. What percent did he get correct?

Picture:

Approximate Answer: _____

2. What is 30% of 60?

Picture:

Approximate Answer: _____

3. 35 is 60% of what number?

Picture:

Approximate Answer: _____

4. 80% of the 100 7th graders at a school are going on a field trip. How many students are going on the trip?

Picture:

Approximate Answer: _____

5. The total bill for dinner was \$79. How much money should the group leave if they want to leave a 15% tip?

Picture:

Approximate Answer: _____



6. A \$79 stereo is on sale for \$65. What percent discount was given?

Picture:

Approximate Answer: _____

7. Mike correctly answered 36 questions on his test. He received a 90%. How many items were on the test?

Picture:

Approximate Answer: _____

8. Nguyen earns 18% commission on everything she sells. If she sells \$65 worth of goods, how much money does she make?

Picture:

Approximate Answer: _____

9. A \$70 skateboard is marked up 35%. What is the new price?

Picture:

Approximate Answer: _____

10. A pair of jeans cost \$32 last year. This year they cost \$38. What was the percent of increase?

Picture:

Approximate Answer: _____



Name the Bigger Number

Directions:

The teacher will hold up two problems. You must decide which is the bigger number. You will have 20 seconds to think and then you will vote by holding up the number of fingers for which scenario you think will be the bigger number. Once you vote, you will use your EPR and ruler or meter stick to “prove” the answer. Record your picture below.

Example:

Picture #1:

Picture #2

1. Picture #1:

Picture #2

2. Picture #1:

Picture #2

3. Picture #1:

Picture #2

4. Picture #1:

Picture #2

5. Picture #1

Picture #2



Teacher Directions

Materials

Copies: Elastic Percent Ruler
Name the Bigger Number - Teacher Copy
Ticket Out the Door Day 1
Ticket Out the Door Day 2

Supplies: Rulers (1 per student)
Meter Sticks (1 per pair)
Elastic (pre-cut - 1 per student, 20 inches long)
Gel Pens (one per student)
String (pre-cut - one string per pair, 25 inches long)
Scissors
Chart Paper
Scotch Tape

Objective

Students will build and label a piece of elastic in increments of 10% and use the elastic to measure and record pictures demonstrating an understanding of the concept of percent in relation to real objects. Students will use the Elastic Percent Rulers to draw models of scenarios involving finding the percent, the part or the whole.

Student Talk Strategy

Think-Pair-Share to consider how to set up scenarios 2 and 3 in Elastic Percent Ruler
Numbered Heads for Using the Elastic Percent Ruler

Academic Language Use

Percent: “out of 100”. Percent will be understood as the number of boxes colored out of 100. Percent will be understood as an “elastic” number, meaning that the actual amount of a percent changes depending upon what the whole is.

Activity Notes

Note: this is a very challenging activity, as it is dealing with the concept that “1” changes. This goes against intuition, as students have come to see 1 as always being 1 object, and now 1 changes depending upon what the whole is.

10 minutes: Make the elastic percent ruler

Students will each make an elastic percent ruler. Distribute a piece of elastic (pre-cut) to each student, 20 inches long, one ruler per student, and one gel pen per student. Pass out tape to each row; each student will need two small pieces. Also pass out activity sheet Elastic Percent Ruler.

Demonstrate making an elastic percent ruler in front of the class and have the students make theirs with you. Begin by using scotch tape to tape down each end of the elastic on the desk. On the elastic, put a mark about 1 inch from the end using the ruler. Label this mark 0. Note: It is important that students leave the 1 inch at the end of the elastic. The 0 **does not** go at the very end of the elastic. Put fifteen more marks on your elastic at 1 inch intervals from your initial mark. Label the mark 10, then the next 20, etc until you get to 150. Students now have an Elastic Percent Ruler (EPR). **Note:** Making an

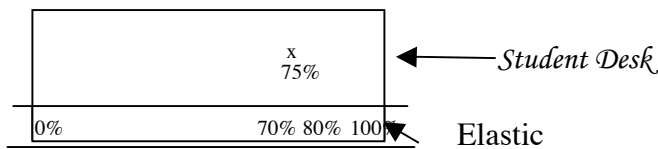


accurate elastic percent ruler is very important to the effectiveness of the activity. Be sure to be explicit about this with students.

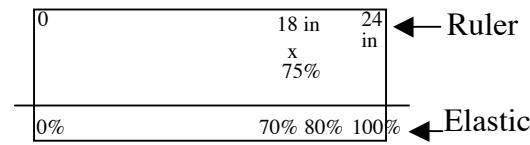
10 minutes: Model problem #1

Put students into groups of 2 for the remainder of this activity. Direct the students’ attention to problem #1.

Stand in front of the class at a student desk so all can see (or use the shortest length of a student table). Let the students know that the width of the desk needs to represent 100%. Show them how you hold the elastic to the left of 0 and to the right of 100% and stretch it so that 0 is at one end of the desk and 100% is at the other end. Then ask the students what the problem is asking. They should reply with, “How much is 75%?” Ask a volunteer to come place their finger (or a small object) on the desk where 75% is on the EPR. Now remove the EPR and draw the following picture (and have the students draw this on Activity Sheet Elastic Percent Ruler as well).



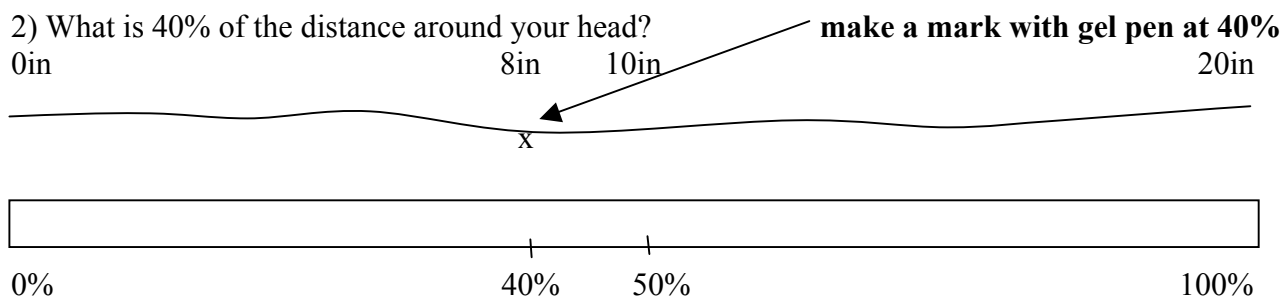
Now take out a ruler (or 2 rulers or a meter stick) and lay it across the width of the desk. On the picture you have drawn, label two numbers for the students: 0 inches and the total width of the desk (in the example below, the width was 24 inches). Ask the students to estimate how many inches 75% would be (using the picture). If it helps, feel free to also label 50% and the corresponding inches for that. Then look at the ruler to determine exactly what 75% is (note: this is still an estimate) and record this on the diagram (see below). Use random selection to call on a volunteer to explain what you just did (to ensure all understand).



10 minutes: Setting up scenarios 2 and 3

Direct the students’ attention to problem #2. Call on a student to come up front to model problem #2. Use Think-Pair-Share to have the students try to understand how to use the elastic for this scenario. To do this, give the class 30 seconds to think silently about how to use the elastic to find 40% of the distance around the head. Then give them 1 minute to discuss with a partner and then select a few students to share ideas. Then model how to do this. Use a piece of string to determine the circumference of the students’ head. Cut the string so that it is exactly the circumference of the head. Place the string flat on the document camera or use magnets to display on the white board. Now it is time to use the elastic percent ruler (EPR) to find the answer to the question below (problem #2 on Activity Sheet Elastic Percent Ruler). In the example below, the student’s head circumference is 20”.





Measure the length of the string with a ruler in inches. (Students may need to use two rulers to complete the measurement, or they can use meter sticks.) In the picture above, the string is 20 in long. Stretch the EPR across the length of the string so that the 0 on the EPR corresponds with the left end of the string and 100% corresponds with the right side of the string. **VERY IMPORTANT NOTE: When using the EPR, students must always hold the left end BEFORE the 0 and the right end AFTER 100% or the highest percent they need greater than 100.**

Ask the following questions to the students (you may want to write the questions ahead of time on a piece of paper to display on the Elmo as you are asking them):

- Why is the 0% at the end of the string?
- Why is the 100% at the other end of the string?
- If the string (or distance around head) is 20 in (this value will vary), what will 50% of the distance around your head be?
- If 50% is 10 in, what is your prediction for 40% of the distance around you head? Why?
- Can anyone think of a reason why the EPR exceeds 100%? When would we need that?

Look at the 40% mark on the EPR and use the gel pen to mark a spot at that point on the string. Then use a ruler to determine how many inches 40% of the string is. In the example above, 40% of the distance around a 20 inch circumference is 8 inches. These answers will vary depending upon the individual person. Note: Using the EPR does not always result in precise answers for a variety of reasons. This exercise is centered around number sense and giving students a clearer picture of what percent means, how it is used, and the ability to estimate and narrow their answers on the CST exam.

Give each pair a piece of string that is 25 inches long. Have the students follow the same process you used up front, but this time have them measure one of the partner's heads. **Make sure students draw a picture each time.**

Follow the same process for scenario #3: have the students use think-pair-share to discuss ideas for how to set it up and then model how to set it up.

20 minutes: students work on scenarios 4-7

Instruct partners to complete problem 3 and then try problems 4-7 together while walking around helping students. Note: #5 is more difficult than the others, as the students will need to hold the end of the EPR and pull it until 60% is at the end of their shoe. When a pair finishes all their problems correctly, have them draw their picture on the whiteboard in the front of the room (or on chart paper to hang around the room) for one of the problems. Do this so that you have numbers 3-7 worked out and shown around the room. Note: Problems 5 and 7 require the students to extend the elastic.



5 minutes: Pairs present their work

When most are done with number 7, have the pairs who solved the problems on the whiteboard share how they set up their problems, how they made the picture and what answer they got.

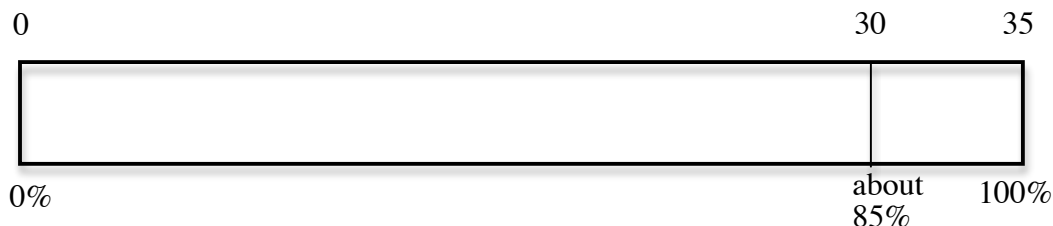
5 minutes: Ticket Out the Door 1

Pass out the Ticket Out the Door and have the students raise their hands when finished (so that you can check it).

5 minutes: Model Problem #1

Pass out activity sheet, Using the Elastic Percent Ruler, a ruler and meter stick to each pair and have students take out the EPRs. Put the students into pairs for this activity. Direct the students' attention to problem #1. Let them know that today they will use their EPR and the numbers on a ruler or meter stick to approximate answers. They **MUST** use their elastic and **DRAW** a picture for each problem. For problem #1, ask the class what number is 100%. Have them chorale the response of 35. Ask them which measuring tool, the ruler or meter stick, would allow them to expand their elastic so that 100% is on 35 (they should reply with using centimeters on the meter stick). Have the students work with their partner to model the problem with their elastic. They should align 0% with 0 on the meter stick and then 100% with 35 on the meter stick. Ask them what they are looking for, 30. Ask them approximately what percent that is. Then draw a picture to model the situation. See below for a sample. Note: each picture needs to

have a line with numbers and a line with percents. You can also choose to show what 50% would be.

**20 minutes: Students work on problems 2-10**

In pairs, set the timer for 20 minutes and have students complete problems 2-10. Make sure they use the elastic and then record a picture, as in the example above. Remind them that they are not using the units of the ruler/meter sticks but rather borrowing the numbers from it. While they work, circulate to assess their work and question them to help guide their thinking. Some questions to ask are, “What is the total?” “Where do you need to hold the elastic?” “What are you looking for?” “Which set of numbers will help you solve this problem?”

5 minutes: Groups discussions to prepare for Numbered Heads

Join together two pairs so that the class is in groups of 4. Give each group 5 minutes to share and discuss their answers, letting them know you will use numbered heads to have students come share their work.

10 minutes: Numbered Heads to Check Work

Number off each group and have the students in each number off from 1-4. Go through each problem by selecting a person number (1-4) and then a group number and having that person come show their work and explain how they solved that problem. Ask the class if they agree with the answer and if they



had other methods (if so, have those students share their thinking). Reward each volunteer with a Gotcha ticket. Continue this to discuss the remaining problems.

15 minutes: Name the Bigger Number

Pass out activity sheet, Name the Bigger Number. Give the students 1 minute to read the directions and then question the class to make sure they understood the directions. Ask them, “how many problems will I show you?” “What should you do when you decide which number will be bigger?” “How will you test this?” Then go through 1 example as a class. Show the example from Name the Bigger Number Teacher Copy. Set the timer for 60 seconds and then call out “Vote”. Have each student show you their answer: 1 finger up for scenario #1 and 2 fingers for scenario #2. Then give the students 1 minute to use the EPR and the meter stick or ruler to test it out. Use random selection to have a student explain which scenario yielded a larger number and why. Have the students draw the scenarios in a picture with the numbers on 1 row and the percent on the other. Continue this as long as you have time.

5 minutes: Ticket Out the Door 2

Pass out the Ticket Out the Door and have the students raise their hands when finished (so that you can check it and then dismiss them).



Name the Bigger Number

Example:

#1
20% of 40

#2
10% of 60

1. #1
40% of 20

#2
50% of 40

2. #1
70% of 10

#2
10% of 50

3. #1
45% of 45

#2
55% of 30

4. #1
30% of 90

#2
80% of 50

5. #1
25% of 100

#2
50% of 60



Name: _____ Date: _____ Period: _____

Ticket Out The Door 1

Directions

DRAW a PICTURE of how you would use the elastic and a ruler/meter stick to solve the problem below. You do NOT need to solve, but make sure to label the elastic and the ruler in your picture.

How long is 60% of the width of your desk?

Name: _____ Date: _____ Period: _____

Ticket Out The Door 1

Directions

DRAW a PICTURE of how you would use the elastic and a ruler/meter stick to solve the problem below. You do NOT need to solve, but make sure to label the elastic and the ruler in your picture.

How long is 60% of the width of your desk?



Name: _____ Date: _____ Period: _____

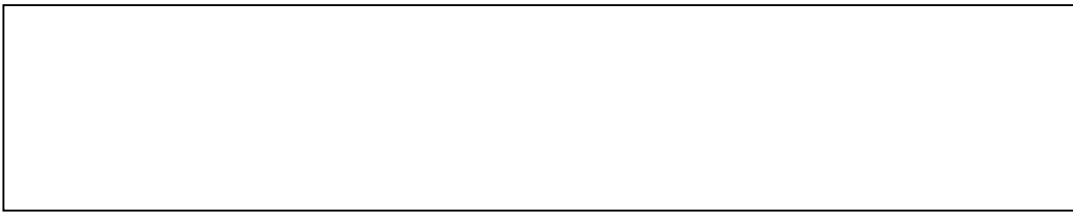
Ticket Out The Door 2

Directions

Use your EPR and a ruler or meter stick to find an approximate solution to the problem below. Make sure to draw a picture to show your work.

What percent is 40 out of 50?

Picture:



Approximate Answer: _____

Name: _____ Date: _____ Period: _____

Ticket Out The Door 2

Directions

Use your EPR and a ruler or meter stick to find an approximate solution to the problem below. Make sure to draw a picture to show your work.

What percent is 40 out of 50?

Picture:



Approximate Answer: _____



Estimating Percent with Box Method

Part 1

Directions:

Draw a picture for each situation, record your percent row and your numbers row, fill in the information from the problem and then estimate what the answer should be.

1. Michael scored 85% on his exam. If there were 30 questions on the exam, how many questions did he solve correctly?
2. What is 40% of 60?
3. 25 is 80% of what number?
4. Katie bought 20 pieces of fruit at the store. Oranges make up 10% of Katie's fruit. How many oranges did Katie buy at the store?
5. Carol has 24 solid-colored T-shirts. 6 of her shirts are green, What percent of Carol's shirts are green?
6. A store pays the manufacturer \$20 for each toaster it buys. Then it sells the toasters at a 30% mark-up. How much profit does the store make on each toaster?



Teacher Directions

Objective

Students will draw boxes and estimate to solve percent problems. Students will practice estimating percent using the box method and the 10% and 50% rules.

Student Talk Strategy

Think-Pair-Share for Estimating Percent with the Box Method

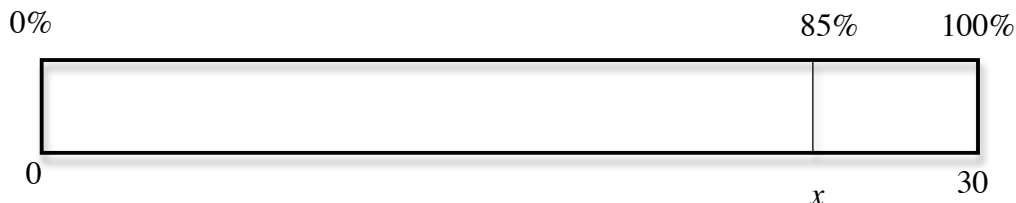
Academic Language Use

Percent: “out of 100”. Percent will be understood as the number of boxes colored out of 100. Percent will be understood as an “elastic” number, meaning that the actual amount of a percent changes depending upon what the whole is.

Activity Notes

20 Minutes: Part 1

Pass out activity sheet Estimating Percent with the Box Method. Have a student read problem #1 aloud. Let the students know that today you will be drawing the box, as was done in Elastic Percent Rulers, but not using the elastic to calculate. Instead, you will be estimating the answer, as often this can help them on a multiple choice test and save them time with calculations. Draw the generic box (see below). Remind the students that one row will be for percent and the other for numbers. Ask them what percents to mark already (should be 0% and 100%) and what numbers to mark (should be 0). After you mark these, ask for volunteers to share what other information the problem gives you and where to mark that on the box. Elicit the answers of 85%, goes on the top before 100%, 30 goes on the number line across from 100%. Ask what you are looking for and record an “x” there. You should end up with the picture shown below.



Now, elicit from the students some methods they can use to estimate what x would be. Use Think-Pair-Share to do this. Pose the question: “How can I estimate what the value of x would be?” Give them 30 seconds to think silently followed by 1 minute to discuss with a partner. Then call on students to share ideas. Model all correct ideas on your picture. Some good ideas include: Marking 50% and 15; In addition to 50%, marking 25% and possibly even 75%; Marking 10% and 3 and then extending that to be able to find 60%, 70%, 80% and 90%. When all methods have been shared, you should have come to a conclusion, at a minimum, that x must be between 15 and 30 and closer to 30. If more accurate methods were suggested (such as finding 10% and using that to calculate 90% and 80%), you may have come to an estimate of somewhere between 24 and 27.

Put the students in pairs and set the timer for 10 minutes. Have them work on problems 2-6. Have students who finish early put their work up on the whiteboard and use the last 2 minutes to have them explain how they set up their picture and how they arrived at their estimate. Note: if the class is struggling, sticking with finding 50% is fine!!



15 minutes: Part 1

Work through problem #1 as a class. Have a student read the problem aloud and then draw the box. Use random selection to have students tell you what numbers and percents to put on the picture and where. Once the picture is labeled, give the students 1 minute to each come up with an estimate for x . Use random selection to have students share methods to estimate. To help them share their answers, put the following sentence starter up: "I found the estimate by _____." Then allow them to work on the rest of the activity sheet. You can choose to have them work alone or in pairs. Circulate during this time to question students to help them think. Ask, "Where does 100% go?" "What is the total?" "Can you extend the box past 100%?" "What are you looking for?" "What would 10% of that be?" "What is 50% of that number?"

5 minutes: Ticket Out the Door

Pass out the Ticket Out the Door and have the students raise their hands when finished (so that you can check it and then dismiss them).



Name: _____ Date: _____ Period: _____

Ticket Out The Door

Directions: Draw a box and label the percents and numbers. Then estimate to solve.

In Max's class, 75% of the students are boys. If there are 30 students in the class, how many are boys?

Picture:



Estimate:

Name: _____ Date: _____ Period: _____

Ticket Out The Door

Directions: Draw a box and label the percents and numbers. Then estimate to solve.

In Max's class, 75% of the students are boys. If there are 30 students in the class, how many are boys?

Picture:



Estimate:



Name: _____ Date: _____ Period: _____

Slap the Best Deal

Rules:

Getting Started:

You should have two piles of cards, each face down. One pile will be the “**deal**” cards, which have the **percent** or amount to be taken off. The second pile will be the “**original item**” pile which has item names and prices.

Object:

The object of the game is to be the partner who most often figures out which card is the best deal.

Playing:

Partner #1 will flip over **two** “**deal**” cards first. Partner #2 will then flip over an “**original item**” card. Players now determine which is the best deal. When one of the two players figures out which card is the best deal for the item shown, he or she “slaps” the card corresponding to the best deal. The opposing player then verifies to see if the person is correct.

Points:

The winner gets one point for each correct answer. If a card is “slapped” and the opposing player(s) deems the card incorrect, then the “slapper” loses a point. The person with the most points after the last round wins! Note: Scratch paper may come in handy.



Teacher Directions

Materials

Supplies: Slap the Best Deal Cards – Teacher Copy (1 set per pair copied and cut out from cardstock; Deal Cards on one color of cardstock (or Which is a Better Deal? Worksheet); Original Item cards on another color of cardstock)

Objective

Students will sort percent word problems into 1-step and multi-step and apply the box method with proportions to solve all types of word problems.

Activity Notes

15 minutes: Slap the Best Deal

Option 1:

Pass out 1 set of Slap the Best Deal Cards to each pair. This is activity sheet Slap the Best Deal Cards, copied and cut out from cardstock. Have students shuffle the piles. Pass out Activity Sheet Slap the Best Deal Rules, and go over the rules of the game. The object of the game is to be the partner who most often figures out which card is the best deal. Partner #1 will flip over two “deal” cards first. Partner #2 will then flip over an “original item” card and players will determine which is the best deal. When one of the two players figures out which deal card is the best deal for the item shown, he or she “slaps” the card corresponding to the best deal. The opposing player then verifies to see if the person is correct. The winner gets one point for each correct answer. If a card is “slapped” and the opposing player(s) deems the card incorrect, then the “slapper” loses a point. The person with the most points after the last round wins! Note: Scratch paper may come in handy.

Model 1 example for the students by flipping over 1 original item and then 2 deal cards. Have the students think silently for 30 seconds and then have them vote which “deal” is better by voting thumbs up for the deal 1, thumbs down for the deal 2 and a sideways thumb if they think they are equal.

Let the pairs play. Make sure to let them know that they need to be using appropriate behavior or else they will be choosing to work on percent problems from the book on their own. Collect the cards at the end of the day, as you will use them again in a few days.

Option 2:

Pass out Which is the Better Deal and Original Item cards and go over the rules of the game. The object of the game is to be the partner who most often figures out which card is the best deal. Have the students slap column A or B for which deal is better. Partners will set the Which is the Better Deal? Activity sheet between them and Partner #1 will then flip over an “original item” card and players will determine which is the best deal. When one of the two players figures out which deal card is the best deal for the item shown, he or she “slaps” column A or B. The opposing player then verifies to see if the person is correct. The winner gets one point for each correct answer. If a column is “slapped” and the opposing player(s) deems the card incorrect, then the “slapper” loses a point. The person with the most points after the last round wins! Note: Scratch paper may come in handy.

5 minutes: Ticket Out the Door

Pass out the Ticket out the Door and have the students raise their hands when finished (so that you can check it and then dismiss them).



Which is a Better Deal?

A	OR	B
10% off the original price		\$5 off the original price
Take half off the original price		Take \$10 off the original price
Take 1/3 off the original price		Take 60% off the original price
Get an extra 20% off the price of the item after a 10% discount		Take 25% off the original price
Pay only 1/3 of the original price		Take \$10 off the item after a 10% discount



Which is a Better Deal?

A	OR	B
5% off the original price		\$8 off the original price
Take 50% off the original price		Take \$15 off the original price
Take 30% off the original price		Take 70% off the original price
Get an extra 10% off the price of the item after a 5% discount		Take 15% off the original price
Pay only 1/4 of the original price		Take \$5 off the item after a 20% discount



Original Item Cards

Camping Tent Original Price \$79.99	Electric Scooter Original Price \$199.99
Basketball Original Price \$24.99	Pants Original Price \$34.99
Video Game Original Price \$19.99	Shoes Original Price \$59.99
iPod® Shuffle Original Price \$49.99	Digital Camera Original Price \$279.99



Name: _____ Date: _____ Period: _____

Ticket Out The Door

Directions: Draw a box and label the percents and numbers. Then write the proportion you would use to solve and SOLVE the problem.

Mr. Tabor deposited \$975 into an account that earns 8% simple interest each year. How much interest did Mr. Tabor earn after one year?

Picture:



Proportion:

Answer:


Name: _____ Date: _____ Period: _____

Ticket Out The Door

Directions: Draw a box and label the percents and numbers. Then write the proportion you would use to solve and SOLVE the problem.

Mr. Tabor deposited \$975 into an account that earns 8% simple interest each year. How much interest did Mr. Tabor earn after one year?

Picture:



Proportion:

Answer:



Party Planning

Background: You and your friend need to plan a birthday party. You want to make it the best party in town! **You have a budget of \$600.** You need to buy enough to have 20 people at the party. There are 3 stores that offer the items you need. Your goal is to decide from which store to buy each item so that you spend the least amount of money. You must buy the following:

- 1 DJ
- 1 Pinata
- Plates/Napkins/Utensils for EACH person
- Decorations
- Food for EACH person

Look through the costs for each item from each store. Then use the coupons and your math skills to decide which items you will buy from each store and record the math you used to calculate the cost of each item and the total bill. Record your planning on the backside of this sheet. If you have time, use an extra piece of paper to draw a picture of what your party will look like (where will the decorations and food go, etc).

Item	Store Awesome	Store Best	Store Cool
DJ	\$200	\$220	\$150
piñata	\$20	\$22	\$25
Plates/Napkins/ utensils	\$1 per person	\$2 per person	\$1.50 per person
Decorations	\$150	\$200	\$225
Food	\$10 per person	\$8 per person	\$9 per person



Item Name	Store	Original Price	Coupon/Discount & Calculations	Final Price
DJ				
Piñata				
Plates/Napkins/ Utensils				
Decorations				
Food				
Sub-total				
Grand Total				



Teacher Directions

Materials

Copies: Party Planning Spreadsheet
Party Planning Coupons (1 Teacher Copy and then sets cut out for each pair)

Supplies: Party Planning Coupons cut-out: 1 set per pair

Objective

Students will use coupons for different stores to decide what items to buy for a party to deepen their understanding of percents in the real world.

Students will increase mastery of solving percent problems through practice.

Activity Notes

30 minutes: Party Planning

Pass out activity sheet Party Planning Spreadsheet. Give the students 2 minutes to read the directions silently. Question them to check for understanding. Ask, “How much money do you have to spend on the party?” “What do you need to buy?” “How many people do you need to buy for?” “Do you have to buy everything from the same store?”

Put up 1 copy of activity sheet Party Planning Coupons. Model the thought process of deciding from where to hire the DJ. Ask the class which store they think they want to hire the DJ from. While some may say Store Cool, point out that Store Best has a 10% off DJ coupon. Ask the students how much 10% off the DJ at Store Best would be. Also remind them that some stores have a coupon to use at the end for the TOTAL order. Note: there is not a right or wrong answer for just the DJ. Pick Store Best for this example and record the work in the table on the activity sheet as shown below.

Item Name	Store	Original Price	Coupon/Discount & Calculations	Final Price
DJ	Store Best	\$220	$ \begin{array}{ccc} 0\% & 20\% & 100\% \\ \hline \boxed{} & \boxed{} & \\ 0 & x & \$220 \\ \\ \frac{20}{x} = \frac{100}{220} \\ x = \$44 \end{array} $	$ \begin{array}{l} \$220 - 44 = \\ \$166 \end{array} $

Once you are confident the students understand, put the students into groups of 2 and pass each pair a set of coupons (activity sheet Party Planning Coupons, cut out). Give them the remaining time to work. When there are about 10 minutes left, let them know they HAVE to make a choice and begin on the final math. Let them know that the groups who spend the least amount of money will receive Gotcha tickets (or some other reward that matters to the students). If any groups finish early, have them draw a sketch of how they would set up their party.



Party Planning Coupons

20% off any 1 item Store Awesome	\$5 off your order of \$50 or more Store Awesome
10% off total bill Store Cool	\$30 off your order of \$100 or more Store Best
25% off plates/napkins Store Cool	10% off DJ Store Best
30% off Piñatas Store Awesome	10% off Decorations Store Cool
\$10 off your total food order Store Cool	\$10 off your total food order Store Best

