

MTSS Math Guidelines K-6

Tier 3 Intensive Intervention

Tier 2
Targeted
Intervention

Tier 1
Core Instruction

Building Math Skills

The team will use the grade appropriate Placement Flowchart and program placement tests to determine intervention placement based on the diagnosed needs of each student.

Universal Screeners

<u>Universal Screener for Number Sense (USNS)</u> & <u>NWEA</u>

Tier 3 - Intensive Interventions & Supports

Small Group Instruction During Intervention Block

Zearn

- Focus Strategies
- Counting Routines

- Illustrative Math
- Math Talks

Word Problems

- Eureka Math
- Fluency

Games and Tools

Tier 2 - Targeted Supplemental Interventions & Supports Whole Group Class Routines and Small Group Instruction During Intervention Block

Zearn

- Focus Strategies
- Counting Routines

- Illustrative Math
- Math Talks

Word Problems

Eureka Math

Fluency

Games and Tools

Tier 1 - Core Curriculum

Expressions (K-5) and IM360 Pilot (6)

Kindergarten

Math Focus Folder Flowchart =

Determining Trimester 1 (Aug. to Nov.) Placement Kindergarten

USNS: 7-9

Group A1 (Far Below)

USNS: 10-13

Group A2 (Below)

USNS:14-17

Group B (Basic)

USNS: 18-21

Group C (Proficient)

No advanced placement available based on USNS

*Be cautious in your interpretation of the students that right now are "proficient" as they are proficient as if it is the 2nd or 3rd week of school. If we ignore the need to support this group, we could find that many of them slip into being "below basic" or "far below basic" when they are reassessed in the winter.

Kindergarten - FALL Focus Folder Activities

K - Group A1 (Far Below)

STABLE Order to Count:

Individual students need to count orally at least 5 times to you each day. Count to 5 accurately, move to count to 7 accurately, move to 10.

1 to 1 Correspondence: Count groups of objects by touching and moving as they count to say only one number with each object.

Counting Collections: Provide frequent rich opportunities for students to practice counting strategies. Click here for more details on counting collections.

Games: Students roll a dice and move that number on a game board to practice subitizing small quantities and 1 to 1 correspondence.

TOOL to Use: Rekenrek and 10 frames, counters, linking cubes, etc.

K - Group A2 (Below)

Subitizing: Know a quantity without counting, use Number Talks with dot cards or ten frame images. First quantities to 5, then to 7, then to 10.

Using a rekenrek, have students model a quantity by sliding all the beads at once vs. counting by 1s.

Matching Quantity to Numeral: Students need multiple ways to match a visual of a quantity to the name of the quantity to the way you write this number.

Counting Collections: Provide frequent rich opportunities for students to practice counting strategies. Click here for more details on counting collections.

Games: For 1 to 1 correspondence have students roll a dice and move around a board. Focus on building quantities and subitizing quantities up to 6.

TOOL to Use: Rekenrek and 10 frames, dot cards, counters, linking cubes, etc

K - Group B (Basic)

Cardinality: Knowing how many are in a set. After counting, students need to be asked, "how many _____?".

Conservation: Knowing an amount doesn't change after it is reorganized or moved around.

Subitizing: Know a quantity without counting, use Number Talks with dot cards or ten frame images. First quantities to 5, then to 7, then to 10.

Using a rekenrek, have students model a quantity by sliding all the beads at once vs. counting by 1s.

NUMBER TALKS: focus on quantities up to 10 using ten frames, rekenrek and dot cards.

Counting Collections: Provide frequent rich opportunities for students to practice counting strategies. Click here for more details on counting collections.

TOOL to Use: Rekenrek and 10 frames

K - Group C (Proficient)

Counting On: Counting on from a number, and counting on with a given set of objects.

NUMBER TALKS: focus on quantities up to 10 using ten frames, rekenrek and dot cards.

Counting Collections: Provide frequent rich opportunities for students to practice counting strategies. Click here for more details on counting collections.

TOOL to Use: Rekenrek and 10 frames

Determining Trimester 2 (Nov. to March) Placement Kindergarten

USNS: 11-13

Group A1 (Far Below)

USNS: 14-17

Group A2 (Below)

USNS:18-29

Group B (Basic)

USNS: 30-36

Group C (Proficient)

No advanced placement available based on USNS

Determining Trimester 3 (March to June) Placement Kindergarten

USNS: 9-13

Group A1 (Far Below)

USNS: 14-19

Group A2 (Below)

USNS:20-24

Group B (Basic)

USNS: 25-30

Group C (Proficient)

No advanced placement available based on USNS

Kindergarten - WINTER / SPRING Focus Folder Activities

K - Group A1 (Far Below)

STABLE Order to Count:

Individual students need to count orally at least 3 times to you each day. Count to 20, counting back from 10, count on first using a 100s chart.

1 to 1 Correspondence: Count groups of objects by touching and moving as they count to say only one number with each object.

Counting Collections:

Frequent opportunities for students to practice counting strategies. Click here for more details on counting collections.

Games: Students roll a dice and move that number on a game board to practice subitizing small quantities and 1 to 1 correspondence. Games that match number to quantity such as Bingo.

TOOL to Use: Rekenrek and 10 frames, counters, linking cubes, etc.

K - Group A2 (Below)

Counting On: Individual students need to orally count on from a number (first using a 100s chart). Work on the transitions across a decade number.

Subitizing: Know a quantity without counting, use Number Talks with dot cards or ten frame images. First quantities to 10. Using a rekenrek, have students model a quantity by sliding all the beads at once vs. counting by 1s.

Matching Quantity to Numeral:

Students need multiple ways to match a visual of a quantity to the name of the quantity to the way you write this number. Focus on building teen numbers, writing and saying these numbers.

Cardinality: Knowing how many are in a set. After counting, students need to be asked, "how many _____?".

Conservation: Knowing an amount doesn't change after it is reorganized or moved around.

Games: Focus on building quantities up to 6.

TOOL to Use: Rekenrek and 10 frames, dot cards, counters, linking cubes, etc

K - Group B (Basic)

Subitizing: See Group A2, focus in on the quantities from 0 to 10

NUMBER TALKS: focus on quantities up to 10 using ten frames, rekenrek and dot cards.

Teen Numbers: Model teen numbers with a single ten frame so students see a ten and some more, or model using base ten blocks. Write the teen number for each model.

Word Problems: Provides context for word problems so students are connecting and building models or drawing representations of word problems that use combinations up to 6. Use both addition (adding to) and subtraction (removing from) situations.

Games: Play games that are using + 1 facts or -1 facts. Here is an example of game. Frog Warts

TOOL to Use: Rekenrek and 10 frames

K - Group C/D (Proficient)

Counting On: Counting on from a number, and counting on with a given set of objects.

NUMBER TALKS: focus on quantities up to 10 using ten frames, rekenrek and dot cards.

Word Problems: Provides context for word problems so students are connecting and building models or drawing representations of word problems that use combinations up to 10. Use both addition (adding to) and subtraction (removing from) situations.

Games: Play games that are using + 1 facts or -1 facts.

TOOL to Use: Rekenrek and 10 frames

First Grade

Math Focus Folder Flowchart

Determining Trimester 1 (Aug. to Nov.) Placement 1st Grade

USNS: 10-14

Group A1 (Far Below)

USNS: 15-19

Group A2 (Below)

USNS:20-24

Group B (Basic)

USNS: 25-30

Group C (Proficient)

No advanced placement available based on USNS

Group D (Advanced)

^{*}Be cautious in your interpretation of the students that right now are "proficient" as they are proficient as if it is the 2nd or 3rd week of school. If we ignore the need to support this group, we could find that many of them slip into being "below basic" or "far below basic" when they are reassessed in the winter.

1st Grade - FALL Focus Folder Activities

1st - Group A1 (Far Below)

Subitizing: Know a quantity without counting, use Number Talks with dot cards or ten frame images. First quantities to 10. Using a rekenrek, have students model a quantity by sliding all the beads at once vs. counting by 1s.

1 to 1 Correspondence:

Count groups of objects by touching and moving as they count to say only one number with each object.

Counting Collections:

Frequent opportunities for students to practice counting strategies. Click here for more details on counting collections.

Games: ways to get at number combinations to make 4 and 5

TOOL to Use: Rekenrek and 10 frames

1st - Group A2 (Below)

Counting by 10s: Count by 10s to 120, forward and backwards, use a 100s chart and/or number line

Counting Across Decades:

Counting on to cross over a decade, 47, 48, 49, 50, 51, etc.

Matching Quantity to Numeral: Match teen quantities to the written number.

1 to 1 Correspondence: Count groups of objects by touching and moving as they count to say only one number with each object.

Counting Collections:

Frequent opportunities for students to practice counting strategies. Click here for more details on counting collections.

Games: ways to get at number combinations to make 4 and 5

TOOL to Use: Rekenrek, 10 frames, number lines, dot cards

1st - Group B (Basic)

Problem Solving: Solve oral word problems with combinations of numbers to 10, including subtraction and missing addend problems.

Subitizing: Know a quantity without counting. Using a rekenrek, have students model a quantity by sliding all the beads at once vs. counting by 1s.

NUMBER TALKS: Focus on quantities up to 10 using ten frames, rekenrek and dot cards.

Counting Collections:

Frequent opportunities for students to practice counting strategies. Click here for more details on counting collections.

Games: ways to get at number combinations to make 6, 7, 8, 9, or 10

TOOL to Use: Rekenrek, 10 frames, number lines, dot cards

1st - Group C (Proficient)

Problem Solving: Solve oral word problems with combinations of numbers to 10, including subtraction and missing addend problems.

Counting On: Counting on from a number, and counting on with a given set of objects.

NUMBER TALKS: Focus on quantities up to 10 using ten frames, rekenrek and dot cards.

Counting Collections:

Frequent opportunities for students to practice counting strategies. Click here for more details on counting collections.

Games: ways to get at number combinations to make 6, 7, 8, 9, or 10

TOOL to Use: Rekenrek, 10 frames, number lines, dot cards

Determining Trimester 2 (Nov. to March) Placement 1st Grade

NWEA 160 & Below NWEA 161-169 NWEA 170-181

NWEA: 170 or Above

NWEA 182 & Above

NWEA: 169 & Below

USNS:18-29

If student scores 30+

move to C group

USNS: 12-17

USNS: 6-11

Group A1

(Far Below)

Group A2 (Below)

Group B (Basic)

NWEA: 170-181

Group C (Proficient)

NWEA: 182 & Above

Determining Trimester 3 (March-June) Placement 1st Grade

NWEA 165 & Below NWEA 166-176 NWEA 177-186

NWEA 187 & Above

NWEA: 176 & Below

NWEA: 177 or Above

USNS: 6-14

Group A1 (Far Below)

USNS: 15-23

Group A2 (Below)

USNS:24-29

If student scores 30+ move to C group

Group B (Basic)

NWEA: 177-186

Group C (Proficient)

NWEA: 187 & Above

1st Grade - WINTER / SPRING Focus Folder Activities

<u>1st - Group A1 (Far</u> Below)

Counting Across Decades:

Counting on to cross over a decade, 47, 48, 49, 50, 51, etc., support with 100s chart and/or number line

Counting by 10s: Count by 10s to 120, forward and backwards

Counting Collections:

Provide frequent rich opportunities for students to practice counting strategies.

Missing Addend Problems:

Focus on combinations of numbers to 10. 4 and ?? make 6.

Games: Ways to get at number combinations to make 6-10

TOOL to Use: Rekenrek, 10 frames, number lines

1st - Group A2 (Below)

Counting Across Decades:

Counting on to cross over a decade, 47, 48, 49, 50, 51, etc.

Counting by 10s: Count by 10s to 120, forward and backwards, use a 100s chart and/or number line

Counting Collections:

Provide frequent rich opportunities for students to practice counting strategies.

Subtraction Problems:

Focus on combinations of numbers to 10. Starting with 8 and you remove 3. How many are left?

Games: Ways to get at number combinations to make 6-10, begin games with specific strategies.

TOOL to Use: Rekenrek, 10 frames, number lines

1st - Group B (Basic)

Problem Solving: Solve oral word problems with combinations of numbers to 20, including subtraction and missing addend problems.

NUMBER TALKS: Focus on quantities up to 10 using ten frames, rekenrek and dot cards.

Number Magnitude:Making Groups of Tens

Games: Ways to get at strategies: +/- 1 facts, +/- 2 Facts, Doubles, Making 10, Extend to facts beyond 10

TOOL to Use: Rekenrek, 10 frames, number lines

<u>1st - Group C/D</u> (Proficient)

Problem Solving: Solve oral word problems with combinations of numbers to 20, including subtraction and missing addend problems.

NUMBER TALKS: Focus on quantities up to 10 using ten frames, rekenrek and dot cards.

Number Magnitude: Making Groups of Tens

Games: Ways to get at strategies: +/- 1 facts, +/- 2 Facts, Doubles, Making 10, Extend to facts beyond 20

TOOL to Use: Rekenrek, 10 frames, number lines

Second Grade

Math Focus Folder Flowchart ——

Determining Trimester 1 (Aug. to Nov.) Placement 2nd Grade

NWEA 165 & Below NWEA 166-176 NWEA 177-186 NWEA 187 & Above

NWEA - 176 & Below

NWEA - 177 or Above

USNS: 10-14

Group A1 (Far Below)

USNS: 15-19

Group A2 (Below)

USNS: 20-24

If student scores 25+ move to C group

Group B (Basic)

NWEA: 177-186

Group C (Proficient)

NWEA: 187 and Above

2nd Grade - FALL Focus Folder Activities

2nd - Group A1 (Far Below)

Counting On: Use counting routines with these students to count on from a given quantity. Use a 100s chart (200s chart) as a tool to get started. Work first with moving across a decade value such as 68, 69, 70, ...

Matching Quantity to Numeral:

Students need multiple ways to match a visual of a quantity to the name of the quantity to the way you write this number. Work with 2-digit first and then move to 3-digit values.

Subitizing: Know a quantity without counting, use Number Talks with dot cards or ten frame images. First quantities to 10, then the teen numbers.

• Using a rekenrek, have students model a quantity by sliding all the beads at once vs. counting by 1s.

Counting Collections: Frequent opportunities for students to practice counting strategies. Click here for more details on counting collections.

TOOL to Use: Ten frames, place value block, 100s charts, items to count.

2nd - Group A2 (Below)

Subitizing: Know a quantity without counting, use Number Talks with dot cards or ten frame images. First quantities to 10, then the teen numbers.

• Using a rekenrek, have students model a quantity by sliding all the beads at once vs. counting by 1s.

Representing and Naming Values:

Given a value(written or represented), represent and identify a value that is 10 more or 10 less. (Click <u>here</u> for an example)

Shake and Drop: Give students a specific number of two-counters. EX: 8 counters. Students shake the counters and drop them onto a plate. They count each color. They write a number bond to show how the number decomposes. Ex: 8 is the same as 6 red and 2 white. Repeat 10 times using the same number of total chips.

Building Numbers with Models:

Students need to be given information in place value language and place value blocks. They use the information to build the quantity and then name the quantity. (Examples below) You can also build 2-digit values using the mini-ten frames. (ex: build 3 tens and 14 ones)

Fluency: Plus 1, Plus 2 facts, Minus 1, Minus 2 Facts GAME

TOOL to Use: Place value blocks, rekenrek, two color counters, mini-ten frame

2nd - Group B (Basic)

NUMBER TALKS: focus on quantities up to 10 using ten frames, rekenrek and dot cards. Then move into greater values. Be sure that strategies are being named. Begin with Make a Ten and then move to Doubles.

Provide Games that help students learn the combinations for a specific fact or for a specific strategy.

(North Carolina: Games Linked to Standards)

Double Trouble Game

<u>Use of Number Bonds to</u> <u>Compose and Decompose</u> <u>Values</u>

TOOL to Use: Rekenrek and 10 frames

2nd- Group C/D (Proficient)

NUMBER TALKS: focus on quantities up to 10 using ten frames, rekenrek and dot cards. Then move into greater values. Be sure that strategies are being named.

Play **Games** to extend knowledge of facts such as <u>Tic</u> <u>Fact Toe</u>

TOOL to Use: Rekenrek and 10 frames

Determining Trimester 2 (Nov. to March) Placement 2nd Grade

NWEA 173 & Below NWEA 174-183 NWEA 184-194

NWEA 195 & Above

NWEA - 183 & Below

NWEA - 184 or Above

USNS: 10-16

Group A1 (Far Below)

USNS: 17-23

Group A2 (Below)

USNS: 24-39

If student scores 40+ move to C group

Group B (Basic)

NWEA: 184-194

Group C (Proficient)

NWEA: 195 and Above

Determining Trimester 3 (March-June) Placement 2nd Grade

NWEA 179 & Below NWEA 180-188 NWEA 189-199 NWEA 200 & Above

NWEA - 188 & Below

NWEA - 189 or Above

USNS: 8-14

Group A1 (Far Below)

USNS: 15-21

Group A2 (Below)

USNS: 22-26

If student scores 27+ move to C group

Group B (Basic)

NWEA: 189-199

Group C (Proficient)

NWEA: 200 and Above

2nd Grade - WINTER to SPRING Focus Folder Activities

2nd - Group A1 (Far Below)

Counting On: Use counting routines with these students to count on from a given quantity. Use a 100s chart (200s chart) as a tool to get started. Work first with moving across a decade value such as 68, 69, 70, ...

Matching Quantity to Numeral:

Students need multiple ways to match a visual of a quantity to the name of the quantity to the way you write this number. Work with 2-digit first and then move to 3-digit values.

Subitizing: Know a quantity without counting, use Number Talks with dot cards or ten frame images. First quantities to 10, then the teen numbers.

• Using a rekenrek, have students model a quantity by sliding all the beads at once vs. counting by 1s.

Counting On: Count on by 1s, 10s, or 100s using an open number line. Label the number line and then come back to show the addition (or subtraction problem).

Adding and Subtracting 10 and 100:

Give students a number to build using place value blocks. Have them add 10 more to the value and write the new value. Record a number bond and a number sentence.

TOOL to Use: Ten frames, place value block, 100s charts, items to count.

2nd - Group A2 (Below)

Counting Sequence: Have students count a range of numbers in a specific way. Ex: 70 to 450 by 10s, 190 to 220 by 1s, 230 to 730 by 100s, 155 to 855 by 100s

Subitizing: Know a quantity without counting, use Number Talks with dot cards or ten frame images. First quantities to 10, then the teen numbers.

• Using a rekenrek, have students model a quantity by sliding all the beads at once vs. counting by 1s.

Representing and Naming Values:

Given a value(written or represented), represent and identify a value that is 10 more or 10 less. (Click <u>here</u> for an example)

Shake and Drop: Give students a specific number of two-counters. EX: 8 counters. Students shake the counters and drop them onto a plate. They count each color. They write a number bond to show how the number decomposes. Ex: 8 is the same as 6 red and 2 white. Repeat 10 times using the same number of total chips.

Building Numbers with Models:

Students need to be given information in place value language and place value blocks. They use the information to build the quantity and then name the quantity. (Examples below) You can also build 2-digit values using the mini-ten frames. (ex: build 3 tens and 14 ones)

Fluency: Plus 1, Plus 2 facts, Minus 1, Minus 2 Facts GAME

TOOL to Use: Place value blocks, rekenrek, two color counters, mini-ten frame

2nd - Group B (Basic)

NUMBER TALKS: focus on quantities up to 10 using ten frames, rekenrek and dot cards. Then move into greater values. Be sure that strategies are being named. Begin with Make a Ten and then move to Doubles.

2-Digit Addition and

Subtraction: Use place value blocks, draw place value charts and disks, and number lines to add and subtract 2-digit numbers. Be sure to have students identify when they are composing (decomposing) ten or a hundred. Name strategies being used such as these for subtraction: Counting Up, Counting Back, Take from, Compensation.

Write 10 More (or Less): Write a number on the board. Have students build the number with place value blocks.. Then they add 10 more and write the next number. Repeat this 10 times. Provide Games that help students learn the combinations for a specific fact or for a specific strategy.

(North Carolina: Games Linked to Standards)

TOOL to Use: Rekenrek and 10 frames

2nd- Group C/D (Proficient/Exceeding)

NUMBER TALKS: focus on quantities up to 10 using ten frames, rekenrek and dot cards. Then move into greater values. Be sure that strategies are being named.

2-Digit Addition and Subtraction:

Show problems using multiple models such as place value charts or open number lines. Name strategies being used such as these for subtraction: Counting Up, Counting Back, Take from, Compensation.

Word Problems: Seek comparison problems for students to solve. Have students identify what is the same of the two items compared which will help them find how they are different. Use a tape diagram to compare how they are the same and how they are different.

Play **Games** to extend knowledge of facts such as <u>Tic Fact Toe</u>

Estimation: Ask students to estimate sums and differences prior to finding the actual value.

TOOL to Use: Rekenrek and 10 frames

Third Grade

Math Focus Folder Flowchart ——

Determining Trimester 1 (Aug. to Nov.) Placement 3rd Grade

NWEA 179 & Below NWEA 180-188 NWEA 189-199

NWEA 200 & Above

NWEA - 188 & Below

NWEA - 189 or Above

USNS: 10-14

Group A1 (Far Below)

USNS: 15-19

Group A2 (Below)

USNS: 20-24

If student scores 25+ move to C group

Group B (Basic)

NWEA: 189-199

Group C (Proficient)

NWEA: 200 and Above

Determining Trimester 2 (Nov. to March) Placement 3rd Grade

NWEA 186 & Below NWEA 187-195 NWEA 196-205

NWEA 206 & Above

NWEA - 195 & Below

USNS: 23-36

If student scores 37+

move to C group

USNS: 16-22

Below)

Group A1 (Far

USNS: 9-15

Group A2 (Below)

Group B (Basic)

NWEA: 196-205

NWFA - 196 or Above

Group C (Proficient)

NWEA: 206 and Above

Determining Trimester 3 (March-June) Placement 3rd Grade

NWEA 191 & Below NWEA 192-200 NWEA 201-210

NWEA 211 & Above

NWEA - 200 & Below

NWEA - 201 or Above

USNS: 10-15

Group A1 (Far Below)

USNS: 16-21

Group A2 (Below)

USNS: 22-26

If student scores 27+ move to C group

Group B (Basic)

NWEA: 201-210

Group C (Proficient)

NWEA: 211 and Above

Group D (Exceeding)

Universal Screener for Number Sense (USNS)

3rd Grade - Focus Folder Activities

3rd-Group A (Far Below)

Counting On: Use counting routines with these students to count on from a given quantity (0 – 120). Use a 100s chart (200s chart) as a tool to get started. Work first with moving across a decade value such as 68, 69, 70, ...

Build and Write Numbers:

Students need to build numbers from 0 – 50, and write each number that is built.

Subitizing: Know a quantity without counting, use Number Talks with dot cards or ten frame images. First quantities to 10, then the teen numbers.

 Using a rekenrek, have students model a quantity by sliding all the beads at once vs. counting by 1s.

Number Combinations:

Work on decomposing numbers to 10 and the Make a Ten strategy. Specifically use a ten frame or rekenrek to show how to decompose a value to make a ten such as with 8 + 7 to be 8 + 2 + 5 to make a ten.

Shake and Drop: Give students a specific number of two-counters. EX: 8 counters. Students shake the counters and drop them onto a plate. They count each color. They write a number bond to show how the number decomposes. Ex: 8 is the same as 6 red and 2 white. Repeat 10 times using the same number of total chips.

TOOLs to Use: 100s charts, two-color counters, rekenrek, subitizing cards.

3rd - Group B (Below)

Counting On: Use counting routines with these students to count on from a given quantity (0 – 500). Use a 100s chart (200s chart) as a tool to get started. Count on by 10s or 100s from any number.

Counting By: Count by 2s or 4s, and then move into counting by 5s or 3s. Count forward and backwards. Start with only a few values in the sequence and move into all the multiples of a value.

Number Talks: Work on the addition strategies. This builds confidence and provides strategies for composing and decomposing numbers using mental math.

Subtraction with Regrouping:

Focus on smaller values such numbers 0-20 as the minuend. Use a single digit value as the subtrahend. Build into minuends of 0 – 50. https://www.mathlearningcenter.org/apps/number-frames

Building Numbers with Models:

Students need to be given information in place value language and place value blocks. They use the information to build the quantity and then name the quantity.

You can also build 2-digit values using the mini-ten frames. (ex: build 3 tens and 14 ones)

TOOLs to Use: 100s charts, place value blocks, place value chips/place value chart, mini-ten frames.

3rd - Group C (Proficient)

NUMBER TALKS: Focus on addition and subtraction strategies. Build into 2-digit and 3-digit numbers that use the specific strategies using mental math.

2-Digit Addition and Subtraction: Use place value blocks, number lines, and place value charts and disks, and number lines to add and subtract 2-digit numbers. Be sure to have students identify when they are composing (decomposing) ten or a hundred. Ask students to name the strategy being used (Subtraction: Counting Up, Counting Back, Take from, Compensation).

Play **Games** to extend knowledge of facts such as <u>Tic</u> <u>Fact Toe</u>

(North Carolina: <u>Games Linked</u> to <u>Standards</u>)

TOOLs to Use: Place Value blocks, place value chips/place value charts, mental math

3rd- Group D (Exceeding)

NUMBER TALKS: Focus on addition and subtraction strategies. Build into 2-digit and 3-digit numbers that use the specific strategies using mental math.

Word Problems: Seek comparison problems for students to solve. Have students identify what is the same about the two items compared which will help them find how they are different. Use a tape diagram to compare how they are the same and how they are different.

Play **Games** to extend knowledge of facts such as <u>Tic</u> <u>Fact Toe</u>

Estimation: Ask students to estimate sums and differences prior to finding the actual value.

TOOLs to Use: Place Value blocks, place value chips/place value charts, mental math **TOOL to Use:** Rekenrek and 10

frames

Fourth Grade

Math Focus Folder Flowchart

Determining Trimester 1 (Aug. to Nov.) Placement 4th Grade

SBAC Level 1 SBAC Level 2 SBAC Level 3

SBAC Level 4

NWEA: 201 & Below

NWEA: 191 &

Group A (Far

NWEA: 192-201

Group B (Basic)

Optional Additional Assessment: USNS USNS: 9-12 (Far

Below)

Below

Below)

USNS: 13-17 (Below)

Optional Additional Assessment: USNS

USNS: 18-22 If student scores 23+ move to C

group

NWEA: 202 & Above

NWEA: 202-211

Group C (Proficient)

NWEA: 212+

Determining Trimester 2 (Nov. to March) Placement 4th Grade

SBAC Level 1 SBAC Level 2

SBAC Level 3 SBAC Level 4

NWEA: 208 & Below

NWEA: 209 & Above

NWEA: 193 &

Below

Group A (Far Below)

Optional Additional Assessment: USNS

USNS: 9-17 (Far

Below)

USNS: 18-26 (Below)

NWEA: 194-208

Group B (Basic)

Optional Additional Assessment: USNS

USNS: 27-44 If student scores 45+ move to C

group

NWEA: 209-218

Group C (Proficient)

NWEA: 219+

Determining Trimester 3 (March to June) Placement 4th Grade

SBAC Level 1 SBAC Level 2

SBAC Level 3 SBAC Level 4

NWEA: 212 & Below

NWEA: 213 & Above

NWEA: 198 &

Below

Group A (Far Below)

Optional Additional Assessment: USNS

USNS: 9-15 (Far

Below)

USNS: 16-23 (Below)

NWEA: 199-212

Group B (Basic)

Optional Additional Assessment: USNS

USNS: 24-39

If student scores 30+ move to C

group

NWEA: 213-222

Group C (Proficient)

NWEA: 223+

4th Grade - Focus Folder Activities

4th-Group A (Far Below)

Counting On and Count Back:

Use counting routines with these students to count on from a given quantity (300 - 1000). Use a 100s chart (200s chart) as a tool to get started.

Build and Write Numbers:

Students need to build numbers using pattern blocks or place value chips from 0 – 400, and write each number that is built.

Number Combinations:

Work on decomposing numbers to 10 and the Make a Ten strategy. Specifically use a ten frame or rekenrek to show how to decompose a value to make a ten such as with 8 + 7 to be 8 + 2 + 5 to make a ten. Use Number Lines or Number racks

Count Bys: Skip count forward and backwards by 2s, 5, and 10 and connect to multiplication and division facts.

Games: Raging rectangles, Math lenga, Addition Card Game with 3 people. 2 players hold card to their forehead. the 3rd person says the sum. Whoever says their card first, gets to keep the two cards.

TOOLs to Use: 100s chart, place value blocks or place value chips/chart, number lines, rekenrek (number racks).

4th - Group B (Below)

Counting On: Use counting routines with these students to count on from a given quantity (300 - 1000). Use a 100s chart (200s chart) as a tool to get started. Count on by 10s or 100s from any number.

Counting By: Count by 3s, and 6s if they know their 2s, 4s, and 8s. Start with only a few values in the sequence and move into all the multiples of a value.

Number Talks: Work on the addition strategies. This builds confidence and provides strategies for composing and decomposing numbers using mental math.

Addition and Subtraction with Regrouping: Use place value blocks or place value chips and a place value chart to model addition and subtraction problems that involve regrouping. Students need to record what they do with the manipulatives in the algorithm as they work the problem.

https://www.mathlearningcenter.org/ apps/number-frames

Games: Raging rectangles, Math Jenga, Multiplication Card Game with 3 people. 2 players hold card to their forehead. the 3rd person says the product. Whoever says their card first, gets to keep the two cards. Scaffold with only cards from 1 to 5 to begin.

TOOLs to Use: Place value blocks, place value chart/chips, whiteboard/marker.

4th - Group C (Proficient)

NUMBER TALKS: Focus on addition and subtraction strategies. Begin with 1-digit and build into 2-digit and 3-digit numbers that use the specific strategies using mental math.

Skip Count/Count By: Skip count by a number forward and backwards. Also skip count by a value from any number. For example, skip count by 3 starting at 5.

Addition and Subtraction:

Have students show more than one way to prove the sum or difference of two numbers. For example, show on a number line and an algorithm.

Games: Raging rectangles, Math Jenga, Multiplication Card Game with 3 people. 2 players hold a card to their forehead. The 3rd person says the product. Whoever says their card first, gets to keep the two cards.

(North Carolina: <u>Games Linked</u> <u>to Standards</u>)

4th- Group D (Exceeding)

NUMBER TALKS: Focus on addition and subtraction strategies. Start with 2-digit numbers and build into 3-digit numbers. Work on building specific strategies using mental math.

Skip Count/Count By: Skip count by a number forward and backwards. Also skip count by a value from any number. For example, skip count by 3 starting at 5.

Addition and Subtraction:

Have students show at least three ways to prove the sum or difference of two numbers. For example, show on a number line, expanded notation, and an algorithm.

Critiquing Work: Provide work for addition or subtraction problems using multiple methods and ask students to find the error that was made in the work. Justify what is wrong and explain how to correct it.

Estimation: Ask students to estimate sums and differences prior to finding the actual value.

Fifth Grade

Math Focus Folder Flowchart ——

Determining Trimester 1 (Aug. to Nov.) Placement 5th Grade

SBAC Level 1 SBAC Level 2

SBAC Level 3 SBAC Level 4

NWEA: 213 & Below

NWEA: 214 & Above

NWEA: 200 &

Below

Group A (Far Below)

Optional Additional Assessment: USNS

USNS: 9-12 (Far

Below)

USNS: 13-17 (Below)

NWEA: 201-213

Group B (Basic)

Optional Additional Assessment: USNS

USNS: 18-22 If student scores 23+ move to C group NWEA: 214-222

Group C (Proficient)

NWEA: 223+

Determining Trimester 2 (Nov. to March) Placement 5th Grade

SBAC Level 1 SBAC Level 2

SBAC Level 3 SBAC Level 4

NWEA: 219 & Below

NWEA: 220 & Above

NWEA: 206 &

Below

Group A (Far Below)

Optional Additional Assessment: USNS

USNS: 8-15 (Far

Below)

USNS: 16-22 (Below)

NWEA: 207-219

Group B (Basic)

Optional Additional Assessment: USNS

USNS: 23-36
If student scores
37+ move to C
group

NWEA: 220-227

Group C (Proficient)

NWEA: 228+

Determining Trimester 3 (March to June) Placement 5th Grade

SBAC Level 1 SBAC Level 2 SBAC Level 3

SBAC Level 4

NWEA: 223 & Below

NWEA: 224 & Above

NWEA: 210 &

Below

Group A (Far Below)

Optional Additional Assessment: USNS

USNS: 7-8 (Far

Below)

USNS: 9-10 (Below)

NWEA: 211-223

Group B (Basic)

Optional Additional Assessment: USNS

USNS: 11-17 If student scores 18+ move to C group NWEA: 224-231

Group C (Proficient)

NWEA: 232+

5th Grade - Focus Folder Activities

5th - Group A (Far Below)

Counting On and Count Back: Count on and count back by 10s from any number.

Counting By: Count by 3s, and 6s if they know their 2s, 4s, and 8s. Start with only a few values in the sequence and move into all the multiples of a value. Count by fractions or count by decimals such as tenths.

Making a Ten:

Work on decomposing numbers to 10 and the Make a Ten strategy. Specifically use a ten frame or rekenrek to show how to decompose a value to make a ten such as with 8 + 7 to be 8 + 2 + 5 to make a ten. Use Number Lines or Number racks

Subtraction with Regrouping: Use place value blocks or place value chips and a place value chart to model subtraction problems that involve regrouping. Students need to record what they do with the manipulatives in the algorithm as they work the problem. https://www.mathlearningcenter.org/

Games: Raging rectangles, Math Jenga, Addition Card Game with 3 people. 2 players hold card to their forehead. the 3rd person says the sum. Whoever says their card first, gets to keep the two cards.

apps/number-frames

TOOLs to Use: Mini ten frames, place value blocks, place value chips/chart.

5th - Group B (Below)

Counting By: Count by 3s, and 6s if they know their 2s, 4s, and 8s. Start with only a few values in the sequence and move into all the multiples of a value. Count by fractions or count by decimals such as tenths.

Subtraction with Regrouping:

Use place value blocks or place value chips and a place value chart to model addition and subtraction problems that involve regrouping. Students need to record what they do with the manipulatives in the algorithm as they work the problem.

https://www.mathlearningcenter.org/apps/number-frames

Subtraction with Fractions: Use models such as Cuisenaire rods to show a fraction removed from a whole number (i.e. 1 - 1/3, 3 - 2/3, 4 - 5/6, 3 - 1 2/5).

Games: Raging rectangles, Multiplication Card Game with 3 people. 2 players hold card to their forehead. The 3rd person says the product. Whoever says their card first, gets to keep the two cards. Scaffold with only cards from 1 to 5 to begin.

TOOLs to Use: Cuisenaire rods, place value blocks, place value chips/chart.

5th - Group C (Proficient)

NUMBER TALKS: Focus on multiplication strategies.

Multiplication and Division:

Have students show more than one way to prove the product or quotient. For example, show a product using an area and expanded notation.

Activity Cards: Use the activity cards in Expressions to support students.

Cuisenaire Rods: Use Cuisenaire rods to model fraction addition and subtraction problems.

Mathematical Thinking:

Using vertical boards for students to work on non-standard word problems. (problems)(more problems by grade level)

(North Carolina: <u>Games Linked</u> <u>to Standards</u>)

TOOLs to Use: Cuisenaire rods

5th- Group D (Exceeding)

NUMBER TALKS: Focus on multiplication and division strategies.

Multiplication and Division:

Have students show more than one way to prove the product or quotient. For example, show a product using an area and expanded notation.

Critiquing Work: Provide work for multiplication and division problems using multiple methods and ask students to find the error that was made in the work. Justify what is wrong and explain how to correct it.

Estimation: Ask students to estimate products and quotients for problems. Students justify their thinking.

Mathematical Thinking: Using vertical boards for students to work on non-standard word problems. (problems)(more problems by grade level)

TOOLs to Use: Cuisenaire rods

Sixth Grade

Math Focus Folder Flowchart

Determining Trimester 1 (Aug. to Nov.) Placement 6th Grade

SBAC Level 1 SBAC Level 2 SBAC Level 3

SBAC Level 4

NWEA: 223 & Below

NWEA: 224 & Above

NWEA: 210 &

Below

Group A (Far Below)

Optional Additional Assessment: USNS

USNS: 9-11 (Far

Below)

USNS: 12-14 (Below)

NWEA: 211-223

Group B (Basic)

Optional Additional Assessment: USNS

USNS: 15-21 If student scores 22+ move to C group NWEA: 224-231

Group C (Proficient)

NWEA: 232+

Determining Trimester 2 (Nov. to March) Placement 6th Grade

SBAC Level 1 SBAC Level 2 SBAC Level 3

SBAC Level 4

NWEA: 222 & Below

NWEA: 223 & Above

NWEA: 210 &

Below

Group A (Far Below)

Optional Additional Assessment: USNS

USNS: 8-10 (Far

Below)

USNS: 11-13 (Below)

NWEA: 211-222

Group B (Basic)

Optional Additional Assessment: USNS

USNS: 14-22 (If student scores 23+ move to C group) NWEA: 223-232

Group C (Proficient)

NWEA: 233+

Determining Trimester 3 (March to June) Placement 6th Grade

SBAC Level 1 SBAC Level 2 SBAC Level 3

SBAC Level 4

NWEA: 225 & Below

NWEA: 226 & Above

NWEA: 213 &

Below

Group A (Far Below)

Optional Additional Assessment: USNS

USNS: 7-8 (Far

Below)

USNS: 9-10 (Below)

NWEA: 214-225

Group B (Basic)

Optional Additional Assessment: USNS

USNS: 11-17
If student scores
18+ move to C
group

NWEA: 226-235

Group C (Proficient)

NWEA: 236+