

SECOND GRADE MATH CURRICULUM

Math Unit: Number Concepts, Numbers to 1,000		Pacing Guide: September-October
Essential Questions	Enduring Understandings	Benchmark Assessment(s)
<ul style="list-style-type: none"> How can you find the value of a digit? What are some different ways to show a number? How do you count by 1s, 5s, 10s, and 100s? How can you use blocks to show a 3-digit number? How can you write a 3-digit number in different ways? How can place value help you to compare 3-digit numbers? 	<ul style="list-style-type: none"> I can use place-value to describe values in a 2-digit number. I can write 2-digit numbers in expanded form, standard form, and word form. I can use patterns to count by 1s, 5s, 10s, and 100s. I can use longs, flats, and cubes to show a 3-digit number using base-10 blocks. I can identify 10 tens as equivalent to 100. I can use a model to solve problems using number comparisons such as $>$, $<$, $=$. 	<ul style="list-style-type: none"> SWBAT complete an assessment that requires them to work with equal groups of objects to gain foundations for multiplication. (e.g. the sum of any doubles fact will be an even number $2+2 = 4$, $3 + 3 = 6$). 2.OA.C.3 SWBAT complete an assessment where they will use number patterns to count to 1000 by 1s, 5s, 10s, and 100s. This will demonstrate their ability to mentally add and subtract 10 or 100 to a number. This will be assessed tri-annually to track student progress. 2.NBT.A.2, 2.NBT.B.8 SWBAT complete an assessment where they write 3-digit and 4-digit numbers in 3 different ways (using base-ten numerals, number names, and expanded form.) They will also write the value of each digit in the number and write the numbers in expanded form (e.g. 100 has the same value as 10 tens; the value of the hundreds place is 100, tens place is 0 and ones place is 0. $100 + 0 + 0 = 100$) 2.NBT.A.1a, 2.NBT.A.3 SWBAT complete an assessment where they use place value to show equal numbers (e.g. 100 refers to one hundred with 0 tens and 0 ones and that 100 ones can be shown and read as 10 tens) 2.NBT.A.1b SWBAT complete an assessment where they will demonstrate an understanding of place value using the $<$, $>$, and $=$ symbols to compare numbers. 2.NBT.A.4
Suggested Activities		
<p>Chapter 1:</p> <ul style="list-style-type: none"> Real World Project: “By the Sea” (Develop understanding of place-value concepts) Student workbook pages 1-8 and Critical Area Projects pg. B1-B2 (can be found online on Think Central). Grab and Go Activities (Planning Guide pg. 94) 		

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- o Activities: 5, 14, and 18
- o Readers:
 - The Roadside Stand
 - Doubles Fun on the Farm
 - Margo's Lights
- o Game: Four in a Row
- Chapter 1 STEM Activities (Think Central):
 - o By a Hair/A Fine Feather
 - o Magnets Everywhere

Chapter 2:

- Grab and Go Activities Planning Guide pg. PG94-97
 - o Activities: 5 and 18
 - o Readers :
 - Dave and Boots
 - The Number Machine
 - Time to Take a Trip!
 - o Games :
 - Fish for Digits!
 - Four in a Row
 - Climb the Steps
- Chapter 2 STEM Activities (On Think Central)
 - o What's the Matter?
 - o Explore the Backyard
 - o Salt of the Earth
 - o A Change of Pace
 - o Rock Resources
- October: Fact family haunted house - design a haunted house where the top triangle part is a fact family. List the facts (2 addition/ 2 subtraction) in the square bottom. Decorate however you would like!
- Place value pumpkin picture - find the equal number for the base 10 blocks or the numbers in expanded form. Use the color code to fill in the correct box. The mystery picture will be complete once you get all of the correct answers!
- Ghost greater than, less than, equal to worksheet
- (TPT Place value bundle) Complete the various activities including adding, subtracting, multiplying (enrichment), adding numbers in expanded form, comparing two numbers using $<$, $>$, $=$.

Reinforcement

Enrichment

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<ul style="list-style-type: none"> • Reteach worksheet pages (Chapter Resources Book) • Personal Math Trainer (Think Central) • Math On the Spot Videos • Response to Intervention Activities (Think Central) • ELL Activities • Strategic Intervention Guide (Think Central) • Intensive Intervention Guide (Think Central) • Screen and implement Tier 2 interventions 	<ul style="list-style-type: none"> • Enrich worksheet pages (chapter resources book) • STEM activities (Think Central) • Mega Math (Think Central) • iTools (Think Central) • Advances Learners Activities • Extend the Project Activities (Real World/Critical Area Project-In book & Think Central) <p>Online Activities:</p> <ol style="list-style-type: none"> 1) Odd and Even - https://www.education.com/game/odd-and-even-numbers-cloud-catcher/ 2) Place Value - 3 Digits - https://www.education.com/game/place-value-machine-3-digit/ 3) Place Value - Dino Kitchen - https://www.education.com/game/dino-kitchen-place-value-to-the-hundreds-place/ <p>Classroom Activities:</p> <ol style="list-style-type: none"> 1) Think Central - Chapter 1 - <u>Magnets Everywhere • Ways Magnets are Used</u> 2) Think Central - Chapter 2 <u>What's the Matter? • Solid, Liquid, or Gas</u> <u>Explore the Backyard • Measure and Compare</u> <u>Salt of the Earth • Salt Water Bodies</u> <u>A Change of Pace • Seasons' Properties</u> <u>Rock Resources • Do the Math!–Solve a Problem</u> <ol style="list-style-type: none"> 3) Toy Detectives - See details - https://docs.google.com/document/d/1R2O4SFQJxcU59QGnBMtGbxfrOrtalyf42bn9YEJGmoA/edit?usp=sharing
Materials and Resources	Other Assessments
<ul style="list-style-type: none"> • GoMath! Student Workbook (Ch. 1-2) • Smart Board 	<ul style="list-style-type: none"> • Beginning-of-Year Test or other Prerequisite assessment • Formative: <ul style="list-style-type: none"> ○ Show What You Know ○ Lesson Quick Check ○ Personal Math Trainer ○ Mid-Chapter Checkpoint (Ch. 1-2) • Summative: <ul style="list-style-type: none"> ○ Chapter Review/Chapter Test (1-2)

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Suggested Websites	Suggested Materials
<ul style="list-style-type: none"> • https://www-k6.thinkcentral.com • https://www.firstinmath.com/ • https://mathseeds.com/ • Even Odd Colider Game http://www.mathnook.com/math/evenoddcollider.html • Place Value Hockey Game http://www.abcya.com/place_value_hockey.htm • Splash Learn www.splashlearn.com 	<ul style="list-style-type: none"> • GoMath! Manipulatives Set • GoMath! Grab and Go Activity Center Materials • 100's chart • magnetic ten frames • magnetic base 10 blocks • Pop to Win • Lakeshore Games
Standards	
<p>2.NBT.A.1 Understand that the three digits of a three-digit number represent amounts of hundred, tens, and ones; e.g., 706 equals 7 hundred, 0 tens, and 6 ones. Understand the following as special cases:</p> <ol style="list-style-type: none"> 100 can be thought of as a bundle of ten tens- called a “hundred”. The numbers from 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight, or nine hundred (and 0 tens and 0 ones). <p>2.NBT.A.2 Count within 1000; skip-count by 5s, 10s, and 100s.</p> <p>2.NBT.A.3 Read and write numbers to 1000 using base-ten numerals, number names, and expanded form.</p> <p>2.NBT.A.4 Compare two three-digit numbers based on meanings of the hundred, tens and ones digits, using $>$, $=$, and $<$ symbols to record the results of comparisons.</p> <p>2.NBT.B.8 Mentally add 10 or 100 to a given numbers 100-900, and mentally subtract 10 or 100 from a given number 100-900.</p> <p>2.OA.C.3 Determine whether a group of objects (up to 20) has an odd or even number of members, e.g., by pairing objects or counting them by 2s; write an equation to express and even number as a sum of two one-digit numbers.</p>	
Cross-Curricular Connections	
<p>21st Century Skills: CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.</p> <p>Technology: 8.1.2.A.4 Demonstrate developmentally appropriate navigation skills in virtual environments (i.e. games, museums).</p> <p>SEL: (Responsible Decision-Making) Develop, implement and model effective problem solving and critical thinking skills.</p> <p>Language Arts: W.2.8.: Recall information from experiences or gather information from provided sources to answer a question.</p>	

Math Unit: Basic Facts & Relationships, 2-Digit Addition, 2-Digit Subtraction, 3-Digit Addition and Subtraction		Pacing Guide: November-February
Essential Questions	Enduring Understandings	Benchmark Assessment(s)

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<ul style="list-style-type: none"> • What are some strategies you can use for remembering addition and subtraction facts? • How are addition and subtraction related? • How do you make an addend a tens number to help solve an addition problem? • How do you record the steps when adding 2-digit numbers? • What are some ways to add 3 or 4 numbers? • How can you break apart numbers to help solve a subtraction problem? • What are the steps you use when you solve 2-digit subtraction problems? • What are some different ways to model, show, and solve subtraction problems? • What are the steps when finding the sum in a 3-digit addition problem? • What are the steps when finding the difference in a 3-digit subtraction problem? • When do you need to regroup? 	<ul style="list-style-type: none"> • I can use patterns and mental strategies to remember addition and subtraction facts. • I can use the inverse relationship of addition and subtraction to recall basic facts. • I can use the strategy known as making a ten to solve addition problems because it is always easier to add to an even ten. • I can draw quick pictures and record 2-digit addition using the standard algorithm. • I can find sums of three and four 2-digit numbers. • I can use the break apart method to make subtracting easier. • I can rewrite a subtraction problem in vertical form and record the steps for problems with and without regrouping. • I can use a number line to add to find a difference, use a bar model, or use the break apart strategy. • I can rewrite an addition problem in vertical form and then regroup the ones and tens to add when necessary. • I can rewrite a subtraction problem in vertical form and regroup the hundreds and tens to subtract. • I can identify when it is 	<ul style="list-style-type: none"> • SWBAT complete an assessment where they will represent and solve problems involving addition and subtraction within 100 to solve one and two step word problems and identify the value of digits in numbers. 2.OA.A.1 • SWBAT complete an assessment where they will fluently add and subtract within 20 using mental math. This will be assessed tri-annually to track student progress. 2.OA.B.2 • SWBAT complete an assessment where they will use place-value understanding and properties of operations to add and subtract within 100 and within 1000, add up to 4 2-digit numbers together, and explain how they found their answer using place value strategies. Students will regroup where necessary. 2.NBT.B.5, 2.NBT.B.6, 2.NBT.B.7, 2.NBT.B.9
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	necessary to regroup (the bottom number is bigger).	
Suggested Activities		
<p>Chapter 3:</p> <ul style="list-style-type: none"> • Real World Project: “A Bunch of Animals” (Review addition facts.) Student workbook pages 151-158 and Critical Area Projects pg. B3-B4 (can be found online on Think Central). • Grab and Go Activities (Planning Guide pg. 95) <ul style="list-style-type: none"> o Activities: 1 and 3 o Readers: <ul style="list-style-type: none"> ▪ Doubles Fun on the Farm ▪ Benny, Bessie, and the Blueberries ▪ Game Time o Game: Four in a Row • Chapter 3 STEM Activities (Think Central): <ul style="list-style-type: none"> o Turn Up the Heat o Ladybug Life o It’s in the Air! <p>Chapter 4:</p> <ul style="list-style-type: none"> • Grab and Go Activities Planning Guide pg. PG94-97 <ul style="list-style-type: none"> o Activities: 9 and 11 o Readers : <ul style="list-style-type: none"> ▪ Nature’s Numbers ▪ Butterfly farms o Games : <ul style="list-style-type: none"> ▪ 2-Digit Shuffle ▪ Soccer Sums • Chapter 4 STEM Activities (On Think Central) <ul style="list-style-type: none"> o People Power o Send in the Clouds o Where Does the Water Go? o Everyday Technology <p>Chapter 5:</p> <ul style="list-style-type: none"> • Grab and Go Activities (Planning Guide pg. 95) <ul style="list-style-type: none"> o Activities: 5, 13, and 15 o Readers: <ul style="list-style-type: none"> ▪ Comic Books for Sale ▪ Party Plans 		

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- o Game:
 - Subtraction Action
 - What is the Difference?
- Chapter 5 STEM Activities (Think Central):
 - o Measure It!

Chapter 6:

- Grab and Go Activities (Planning Guide pg. 95)
 - o Activities: 16 and 19
 - o Readers:
 - The If Game
 - The Bug Boys
 - o Game:
 - Around the World
- Chapter 6 STEM Activities (Think Central):
 - o The Center of Attention
 - o In Your Place
 - o At the Beach

Fact Ninja Challenge

Students will use flash cards to practice their basic math facts. They will begin with addition and once they have mastered all of their facts, they may move on to subtraction. Each week the teacher will have students take a fact quiz on whichever fact they have been practicing (e.g. their 2's facts: $0+2$, $1+2$, $2+2$, $3+2$, $4+2$, etc.) If they get 100% of their facts correct they can move onto the next round (3's facts).

Reinforcement	Enrichment
<ul style="list-style-type: none"> • Reteach worksheet pages (Chapter Resources Book) • Personal Math Trainer (Think Central) • Math On the Spot Videos • Response to Intervention Activities (Think Central) • ELL Activities • Strategic Intervention Guide (Think Central) • Intensive Intervention Guide (Think Central) • Screen and implement Tier 2 interventions 	<ul style="list-style-type: none"> • Enrich worksheet pages (chapter resources book) • STEM activities (Think Central) • Mega Math (Think Central) • iTools (Think Central) • Advances Learners Activities • Extend the Project Activities (Real World/Critical Area Project-In book & Think Central) <p>Online Activity Chapter 3::</p> <ol style="list-style-type: none"> 1) Place Value - Dino Kitchen - https://www.education.com/game/dino-kitchen-place-value-to-the-hundreds-place/ <p>Classroom Activity:</p> <ol style="list-style-type: none"> 1) Think Central - <u>Turn Up the Heat • Temperature Effects</u> <u>Ladybug Life • Metamorphosis</u> 2) Candy Store See details -

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<https://docs.google.com/document/d/1R2O4SFQJxcU59QGnBMtGbxfrOrtalyf42bn9YEJGmoA/edit?usp=sharing>

Online Activity Chapter 4:

- 1) Alien Addition - <https://www.coolmath4kids.com/math-games/alien-addition>
- 2) Jet Ski Addition - <https://www.coolmath4kids.com/math-games/jet-ski-addition?tid=1>
- 3) Minus Mission - <https://www.coolmath4kids.com/math-games/minus-mission?tid=2>

Classroom Activity:

- 1) Think Central -
[People Power • Human-Made Resources](#)
[Send In the Clouds • Types of Clouds](#)
[Where Does the Water Go? • Water Cycle](#)
[Everyday Technology • Do the Math!–Solve a Problem](#)

- 2) Teacher Store See Details -
<https://docs.google.com/document/d/1R2O4SFQJxcU59QGnBMtGbxfrOrtalyf42bn9YEJGmoA/edit?usp=sharing>

Online Activity Chapter 5:

- 1) Alien Addition - <https://www.coolmath4kids.com/math-games/alien-addition>
- 2) Jet Ski Addition - <https://www.coolmath4kids.com/math-games/jet-ski-addition?tid=1>
- 3) Minus Mission - <https://www.coolmath4kids.com/math-games/minus-mission?tid=2>

Classroom Activity:

- 1) Think Central -
[Measure It! • Do the Math!–Measure Temperature](#)

- 2) Teacher Store - See Details -
<https://docs.google.com/document/d/1R2O4SFQJxcU59QGnBMtGbxfrOrtalyf42bn9YEJGmoA/edit?usp=sharing>

Online Activity Chapter 6:

- 1) Alien Addition - <https://www.coolmath4kids.com/math-games/alien-addition>
- 2) Jet Ski Addition - <https://www.coolmath4kids.com/math-games/jet-ski-addition?tid=1>
- 3) Minus Mission - <https://www.coolmath4kids.com/math-games/minus-mission?tid=2>

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	<p>Classroom Activity:</p> <ol style="list-style-type: none"> 1) Think Central - <u>The Center of Attention • The Solar System</u> <u>In Your Place • The Environment</u> <u>At the Beach • Do the Math!–Solve a Problem</u> 2) Jewelry Store - See Details <u>https://docs.google.com/document/d/1R2O4SFQJxcU59QGnBMtGbxfrOrtalyf42bn9YEJGmoA/edit?usp=sharing</u>
Materials and Resources	Other Assessments
<ul style="list-style-type: none"> • GoMath! Student Workbook (Ch. 3-6) • Smart Board 	<ul style="list-style-type: none"> • Formative: <ul style="list-style-type: none"> ○ Show What You Know ○ Lesson Quick Check ○ Personal Math Trainer ○ Mid-Chapter Checkpoint (Ch. 3-6) • Summative: <ul style="list-style-type: none"> ○ Chapter Review/Chapter Test (3-6)
Suggested Websites	Suggested Materials
<ul style="list-style-type: none"> • <u>https://www-k6.thinkcentral.com</u> • <u>https://www.firstinmath.com/</u> • <u>https://mathseeds.com/</u> • Addition and Subtraction Games <u>http://www.mathplayground.com/index_addition_subtraction.html</u> • Balloon Pop Subtraction <u>http://www.abcya.com/subtraction_game.htm</u> • Splash Learn <u>www.splashlearn.com</u> 	<ul style="list-style-type: none"> • GoMath! Manipulatives Set • GoMath! Grab and Go Activity Center Materials • 100's chart • counters • dice • Addition/Subtraction Splat • Pop to Win • Lakeshore Games
Standards	
<p>2.OA.A.1 Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the</p>	

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problem.

2.OA.B.2 Fluently add and subtract within 20 using mental strategies. By end of Grade 2, know from memory all sums of two one-digit numbers.

2.NBT.B.5 Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.

2.NBT.B.6 Add up to four two-digit numbers using strategies based on place value and properties of operations.

2.NBT.B.7 Add and subtract within 1000, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method. Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds.

2.NBT.B.9 Explain why addition and subtraction strategies work, using place value and the properties of operations.

Cross-Curricular Connections

21st Century Skills: CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.

Technology: 8.1.2.A.4 Demonstrate developmentally appropriate navigation skills in virtual environments (i.e. games, museums).

SEL: (Responsible Decision-Making) Develop, implement and model effective problem solving and critical thinking skills.

Language Arts: W.2.8.: Recall information from experiences or gather information from provided sources to answer a question.

Math Unit: Money and Time, Length in Customary Units, Length in Metric Units, Data		Pacing Guide: March-May
Essential Questions	Enduring Understandings	Benchmark Assessment(s)
<ul style="list-style-type: none"> What are the names and values of the different coins? How can you find the total value of a group of coins? How can you tell the time on a clock by looking at the clock hands? What tools can be used to measure length and how do you use them? What units can be used to measure length and how do they compare with each other? How can you estimate the length of an object? If you knew the length of one object, how can you 	<ul style="list-style-type: none"> I can identify pennies, nickels, dimes, and quarters. I know their values (1, 5, 10, 25 cents respectively). I can find the total value of a collection of quarters, dimes, novels, and pennies by applying counting patterns. I can tell the time on a clock by looking at the minute and hour hand to tell time to the nearest 5 minutes, to the hour, and half hour. I can use various tools to measure length depending on the size and 	<ul style="list-style-type: none"> SWBATcomplete an assessment where they will estimate the lengths of various objects. Then, they will select the appropriate tool that should be used to measure each object (ruler, yardstick, meter stick, or measuring tape. Students will measure each object twice, using the length of units of different lengths for the two measurements (e.g. inches and feet) 2.MD.A.1, 2.MD.A.2, 2.MD.A.3, 2.MD.A.4 SWBAT complete an assessment where they will use addition and subtraction within 100 to solve word problems involving lengths that are given in the same units. 2.MD.B.5, 2.MD.B.6 SWBAT complete an assessment where they will tell time from a clock as a.m. or p.m. based on the problem scenario, tell time to the nearest 5 minutes, half hour, and hour, as well as express time in various ways. 2.MD.C.7 SWBAT complete an assessment where they will select combinations of bills and coins with a given value, choose coins

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<p>estimate the length of another object?</p> <ul style="list-style-type: none"> • How are tally marks used to record data for a survey? • How is a picture graph made? • How do you know what the bars in a bar graph stand for? 	<p>shape of the object.</p> <ul style="list-style-type: none"> • I can measure objects to the nearest inch, foot, yard, centimeter, or meter. • I can estimate the lengths of objects by mentally partitioning the lengths into a particular unit (inch, centimeter, etc.). • I can use known lengths to estimate unknown lengths. • I can collect data in a survey and record that data in a tally chart. • I can make picture graphs to represent data to help solve a problem. • I can label the parts of a bar graph so I know what the bars stand for. 	<p>to show amounts in different ways, and find the value of a collection of coins. Students will also be able to count a collection of a bill and coins with a total value greater than \$1.00. 2.MD.C8</p> <ul style="list-style-type: none"> • SWBAT complete an assessment where they will create and and interpret various forms of data including a tally chart, bar graph, and picture graph. 2.MD.D.9, 2.MD.D.10
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Suggested Activities

Chapter 7:

- Grab and Go Activities (Planning Guide pg. 96)
 - o Activities: 6 and 8
 - o Readers:
 - Coin Trick
 - Time to Go Shopping
 - All the Time
 - Is it Time Yet?
 - o Game:
 - Tic Tac Total
 - Just in Time
- Chapter 7 STEM Activities (Think Central):
 - o Let's Test It!
 - o Why it Matters
 - o Turn, Turn, Turn

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Other Activities:

Time - Students will keep a sheet with blank clocks in their to-do folder. The teacher will have students take out their sheet at various points of the day to practice writing down what time it is on the classroom clock.

Money - Students can play various money games and centers including:

- 'Making Cents' Game from Lakeshore to practice their skills.
- 'I have, who has' game (one student may have a card which says an amount on it \$1.05 and another student might have the word card for that amount, or the coins which make up that amount.)
- Students could use the cash register to practice adding amounts of money.

Chapter 8:

- Grab and Go Activities (Planning Guide pg. 97)
 - o Activities: 17
 - o Readers:
 - Nature Walk
 - A Trip to the Pond
 - o Game:
 - How Long?
- Chapter 8 STEM Activities (Think Central):
 - o Plan and Build
 - o Let's Check Again!

Chapter 9:

- Real World Project: "Flying a Kite" (Use nonstandard units to measure length) Student workbook pages 455-462 and Critical Area Projects pg. B5-B6 (can be found online on Think Central).
- Grab and Go Activities (Planning Guide pg. 97)
 - o Activities: 17
 - o Readers:
 - Nature Walk
 - A Trip to the Pond
 - o Game:
 - How Long?
- Chapter 9 STEM Activities (Think Central):
 - o On the Move
 - o Units to Know

Other Activities:

Measurement - The teacher can introduce the 'Measure-thon'. This is a way for students to practice their measuring skills (both standard and metric) which competing with their classmates to see who can toss, kick, blow, and flick a pom pom the furthest. This activity can be completed inside or outside. Students will use rulers, yardsticks, and meter sticks to measure distances and record them. They will also answer questions about their results and the class data will be recorded in a bar graph. Certificates will be awarded to the winners!

Chapter 10:

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- Grab and Go Activities (Planning Guide pg. 97)
 - Activities: 2
 - Readers:
 - Wow! Fluffo Can Eat!
 - What Do You Like?
 - Game:
 - Race to Finish
- Chapter 10 STEM Activities (Think Central):
 - The Three Rs
 - Over the Moon
 - Flower Power
 - Plant Start-Ups

Other Activities:

Data - Students can go around the room to survey students about a particular topic (e.g. what is your favorite sport: tennis, volleyball, football, or soccer). Students will record tallies and then create a bar graph to track their results. Students can do this same thing to create a picture graph.

Reinforcement	Enrichment
<ul style="list-style-type: none"> ● Reteach worksheet pages (Chapter Resources Book) ● Personal Math Trainer (Think Central) ● Math On the Spot Videos ● Response to Intervention Activities (Think Central) ● ELL Activities ● Strategic Intervention Guide (Think Central) ● Intensive Intervention Guide (Think Central) ● Screen and implement Tier 2 interventions 	<ul style="list-style-type: none"> ● Enrich worksheet pages (chapter resources book) ● STEM activities (Think Central) ● Mega Math (Think Central) ● iTools (Think Central) ● Advances Learners Activities ● Extend the Project Activities (Real World/Critical Area Project-In book & Think Central) <p>Chapter 7:</p> <p>Online Activities:</p> <ol style="list-style-type: none"> 1) Time in the Sky - https://www.education.com/game/time-in-the-sky/ 2) Alarm Clock - https://www.education.com/game/floyd-alarm-clock/ 3) Couch Fishing Money- https://www.education.com/game/identifying-coins-couch-fishing/ 4) Piggy Bank Math - https://www.education.com/game/money-math-piggy-bank-game/ <p>Classroom Activities:</p> <ol style="list-style-type: none"> 1) Think Central - <u>Let's Test It! • Test, Draw Conclusions, Communicate</u> <u>Why It Matters • Environmental Effects</u>

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Turn, Turn, Turn • Do the Math!–Tell Time

- 2) Amusement Park Field Trip Schedule - Time
- 3) Travel Agent - Time Data Collection
- 4) Cookie Store - Money
 - a) Classroom Sale - Allowance / Money
- 5) See Details for Activities in -
<https://docs.google.com/document/d/1R2O4SFQJxcU59QGnBMtGbxfrOrtalyf42bn9YEJGmoA/edit?usp=sharing>

Chapter 8:

Online Activities:

- 1) Building Measuring -
<https://www.education.com/game/building-measurement-super-floyd/>
- 2) Rockstar Measurement-
<https://www.education.com/game/rock-star-ruler-measurement/>
- 3) Ordering by Length -
<https://www.education.com/game/ordering-lengths-and-heights/>
- 4) Movie Night Measurement -
<https://www.education.com/game/movie-night-measurement/>

Classroom Activities:

- 1) Think Central -
Plan and Build • Make a Leash
Let's Check Again! • Do the Math!–Measure Length
- 2) Park Rangers- Measurements - See Details
<https://docs.google.com/document/d/1R2O4SFQJxcU59QGnBMtGbxfrOrtalyf42bn9YEJGmoA/edit?usp=sharing>

Chapter 9:

Online Activities:

- 1) Building Measuring -
<https://www.education.com/game/building-measurement-super-floyd/>
- 2) Rockstar Measurement-
<https://www.education.com/game/rock-star-ruler-measurement/>
- 3) Ordering by Length -
<https://www.education.com/game/ordering-lengths-and-heights/>

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	<p><u>and-heights/</u></p> <p>4) Movie Night Measurement - https://www.education.com/game/movie-night-measurement/</p> <p>Classroom Activities:</p> <p>1) Think Central - <u>On the Move • Rolling, Spinning, Sliding</u> <u>Units to Know • Do the Math!–Measure Width</u></p> <p>2) Park Rangers- Measurements - See Details https://docs.google.com/document/d/1R2O4SFQJxcU59QGnBMtGbxfrOrtalyf42bn9YEJGmoA/edit?usp=sharing</p> <p>Chapter 10:</p> <p>Online Activities:</p> <p>1) Germ Data- https://www.education.com/game/graphing-germs/</p> <p>2) Graphing Color - https://www.education.com/game/color-bar-graph/</p> <p>Classroom Activities:</p> <p>1) Think Central - <u>The Three Rs • Reuse, Reduce, Recycle</u> <u>Over the Moon • Moon Phases</u> <u>Flower Power • Function of Flower Parts</u> <u>Plant Start-Ups • Do the Math!–Interpret a Table</u></p> <p>2) Moving Company - Sorting Data See Details - https://docs.google.com/document/d/1R2O4SFQJxcU59QGnBMtGbxfrOrtalyf42bn9YEJGmoA/edit?usp=sharing</p>
Materials and Resources	Other Assessments
<ul style="list-style-type: none"> GoMath! Student Workbook (Ch. 7 - 10) Smart Board 	<ul style="list-style-type: none"> Formative: <ul style="list-style-type: none"> Show What You Know Lesson Quick Check Personal Math Trainer Mid-Chapter Checkpoint (Ch. 7-10) Summative: <ul style="list-style-type: none"> Chapter Review/Chapter Test (7-10)

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Suggested Websites	Suggested Materials
<ul style="list-style-type: none"> • https://www-k6.thinkcentral.com • https://www.firstinmath.com/ • https://mathseeds.com/ • Measurement Games http://www.onlinemathlearning.com/measurement-games.html • Money Bingo http://www.abcy.com/money_bingo.htm • Time Games http://www.maths-games.org/time-games.html • Splash Learn www.splashlearn.com 	<ul style="list-style-type: none"> • GoMath! Manipulatives Set • GoMath! Grab and Go Activity Center Materials • 100's chart • Large Judy Clock • mini Judy Clocks • Play money • counters • dice • pom poms • Addition/Subtraction Splat • playing cards • Pop to Win • Inch/Centimeter Rulers • yard stick • meter stick • Centimeter cubes • Inch cubes • unifix cubes • paper clips • measuring tape • Lakeshore Games
Standards	
<p>2.MD.A.1 Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes.</p> <p>2.MD.A.2 Measure the length of an object twice, using length units of different lengths for the two measurements; describe how the two measurements relate to the size of the unit chosen.</p> <p>2.MD.A.3 Estimate lengths using units of inches, feet, centimeters, and meters.</p> <p>2.MD.A.4 Measure to determine how much longer one object is than another, expressing the length difference in terms of a standard length unit.</p> <p>2.MD.B.5 Use addition and subtraction within 100 to solve word problems involving lengths that are given in the same units, e.g., by using drawers (such as drawings of rulers) and equations with a symbol for the unknown number to represent the problem.</p> <p>2.MD.B.6 Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points corresponding to the numbers 0, 1, 2,..., and represent whole-number sums and differences within 100 on a number line diagram.</p> <p>2.MD.C. 7 Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.</p> <p>2.MD.C.8 Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using \$ and ¢ symbols appropriately.</p> <p>2.MD.D.9 Generate measurement data by measuring lengths of several objects to the nearest whole unit, or by making repeated measurements of the same object. Show the measurements by making a line plot, where the horizontal scale is marked off in whole-number units.</p> <p>2.MD.D.10 Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple put together, take-apart, and compare problems using information presented in a bar graph.</p>	

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Cross-Curricular Connections

21st Century Skills

9.1.4.B.3 Explain why a budget is and why it is important.

9.1.4.B.5 Identify ways to earn and save.

9.1.4.C.1 Explain why people borrow money and the relationship between credit and debt.

CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.

Technology-8.1.2.A.4 Demonstrate developmentally appropriate navigation skills in virtual environments (i.e. games, museums).

SEL- (Responsible Decision-Making) Develop, implement and model effective problem solving and critical thinking skills.

Language Arts- W.2.8.: Recall information from experiences or gather information from provided sources to answer a question.

Math Unit: Geometry and Fraction Concepts		Pacing Guide: June
Essential Questions	Enduring Understandings	Benchmark Assessment(s)
<ul style="list-style-type: none"> How can you describe some two-dimensional and three-dimensional shapes? How can you describe equal parts of shapes? 	<ul style="list-style-type: none"> I can match two and three-dimensional shapes to real-world objects, and describe them according to the number of faces, edges, and vertices they have. I can describe equal parts of shapes by either halves, thirds, or fourths. 	<ul style="list-style-type: none"> SWBAT complete an assessment where they will reason with shapes and their attributes by matching 3-dimensional shapes to real-world objects, determining how many cubes it would take to build a rectangular prism, and by recognizing attributes of 2-dimensional shapes. 2.G.A.1 SWBAT complete an assessment where they will determine how many tiles are needed to cover a rectangle. 2.G.A.2 SWBAT complete an assessment where they will draw lines to divide shapes into equal parts (halves, thirds, and fourths) and identify shapes that have been divided into fourths. 2.G.A.3

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Suggested Activities

- Real World Project: “At the Farm Stand” (Develop understanding of geometry concepts) Student workbook pages 693-700 and Critical Area Projects pg. B7-B8 (can be found online on Think Central).
- Grab and Go Activities (Planning Guide pg. 97)
 - Activities: 10, 12, and 20
 - Readers:
 - Building a Mini-Park
 - Square Fair
 - Taking Shape
 - Game:
 - Hidden Figures
- Chapter 11 STEM Activities (Think Central):
 - Attract Attention

Other Activities:

Students can use geoboards or pattern blocks to create pictures with 2-D and 3-D shapes. If students are using the pattern blocks, they can trace around them to make the picture permanent and then use that picture to tell a story (e.g. The Adventures of Pam the Polygon). Students can share work in small groups and then share with the class.

Reinforcement

- Reteach worksheet pages (Chapter Resources Book)
- Personal Math Trainer (Think Central)
- Math On the Spot Videos
- Response to Intervention Activities (Think Central)
- ELL Activities
- Strategic Intervention Guide (Think Central)
- Intensive Intervention Guide (Think Central)
- Screen and implement Tier 2 interventions

Enrichment

- Enrich worksheet pages (chapter resources book)
- STEM activities (Think Central)
- Mega Math (Think Central)
- iTools (Think Central)
- Advances Learners Activities
- Extend the Project Activities (Real World/Critical Area Project-In book & Think Central)

Online Activities:

- 1) Hexuzzle Puzzle - <https://www.education.com/game/hexuzzle-2/>
- 2) Pattern Blocks - <https://www.mathplayground.com/patternblocks.html>

Classroom Activity:

- 1) Think Central - Attract Attention • Do the Math!- Measuring Distance

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	2) Geo Pizza - Geometry and Fractions - See Details https://docs.google.com/document/d/1R2O4SFQJxcU59QGnBMtGbxfrOrtalyf42bn9YEJGmoA/edit?usp=sharing
Materials and Resources	Other Assessments
<ul style="list-style-type: none"> GoMath! Student Workbook (Ch. 11) Smart board 	<ul style="list-style-type: none"> End-of-Year Test Formative: <ul style="list-style-type: none"> Show What You Know Lesson Quick Check Personal Math Trainer Mid-Chapter Checkpoint (Ch. 11) Summative: <ul style="list-style-type: none"> Chapter Review/Chapter Test (11)
Suggested Websites	Suggested Materials
<ul style="list-style-type: none"> https://www-k6.thinkcentral.com https://www.firstinmath.com/ https://mathseeds.com/ Fraction Games http://www.maths-games.org/fraction-games.html Shapes Games http://pbskids.org/games/shapes/ Splash Learn www.splashlearn.com 	<ul style="list-style-type: none"> GoMath! Manipulatives Set GoMath! Grab and Go Activity Center Materials Pattern blocks Geoboards Lakeshore games Pop to Win
Standards	
<p>2.G.A.1 Recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces. Identify triangles, quadrilaterals, pentagons, hexagons, and cubes.</p> <p>2.G.A.2 Partition a rectangle into rows and columns of same-size squares and count to find the total number of them.</p> <p>2.G.A.3 Partition circles and rectangles into two, three, or four equal shares, describe the shares using the words halves, thirds, half of, a third of, etc., and describe the whole as two halves, three thirds, four fourths. Recognize that equal shares of identical wholes need not have the same shape</p>	
Cross-Curricular Connections	

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