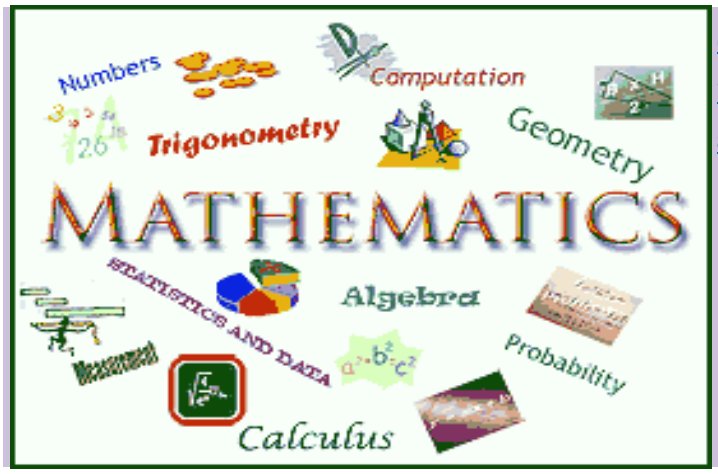

[6th Grade]

[7th Grade]

[8th Grade]

Timeline	Themes/Enduring Understandings/Essential Questions for the Unit	Common Core Standards Addressed	Assessments	Standards Based Skills and Concepts Targeted	Strategies/Practices Used to Teach Skills and Concepts	Resources/Texts Used
1st Quarter	**Counting and Cardinality:** **Knowing number names and the count sequence:** ***Enduring Understanding-*** *Students will be able to count to 100 by 1's and 10's and represent a number of objects with a written numeral 0-20.* ***Essential Questions-*** *Why is it important to be able to count to 100 and represent groups with the correct numeral?*	K.CC1-3	Observation Manipulatives Rote Counting	Count orally to 100 by skip counting and represent number of objects in a group with a written numeral.	Whole Group- Counting Orally Small Group- Sorting objects and writing numerals Independent Work- Representing/Writing numerals for groups	Sadlier Oxford Textbook Manipulative Objects Number Line
	Count to tell the number of objects: ***Enduring Understanding-*** *Students will be able to understand the relationship between numbers and quantities connecting counting to cardinality and counting to answer "how many?"* ***Essential Questions-*** *How are numbers connected to counting grouping of objects?*	K.CC4-5	One to one correspondence sheets	Recall number order and represent a numeral for groups of objects using one to one correspondence.	Whole Group- Teacher Modeling Small Groups- Counting out loud in succession Independent Work- Represent numbers using snap cubes	Kindergarten Ultimate Skills Builder
	Classify Objects and count the number of objects in each category: ***Enduring Undestanding-*** *Students will classify objects into given categories.* ***Essential Questions-*** *Why is it important to classify objects into categories?*	K.MD3	Sorting Trays Manipulatives	Classify objects by shape, color, and size.	Whole Group- Sort children in class Small Group- Sorting Bears Independent Work- Sort picture cards	Mathematics in Action
	Geometry: ***Enduring Understanding-*** *Students will be able to analyze, compare, create, compose, identify and describe shapes.* ***Essential Questions-*** *Why is it important to be able to identify shapes and their attributes?*	K.G1-6	Geometric Solids Tanagrams	Identify shapes and recognize their attributes.	Whole Group- Classroom shape search Small Group- Sorting shapes/ solid figures Independent Work- Create pictures from shapes	Math Connects Tanagram Book

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2nd Quarter	**Counting and Cardinality:** **Knowing number names and the count sequence:** ***Enduring Understanding-*** *Students will be able to count to 100 by 1's and 10's and represent a number of objects with a written numeral 0-20.* ***Essential Questions-*** *Why is it important to be able to count to 100 and represent groups with the correct numeral?*	K.CC1-3	Observation Manipulatives Rote Counting	Count orally to 100 by skip counting and represent number of objects in a group with a written numeral.	Whole Group- Counting Orally Small Group- Sorting objects and writing numerals Independent Work- Representing/Writing numerals for groups	Sadlier Oxford Textbook Manipulative Objects Number Line
	Compare Numbers: ***Enduring Understanding-*** *Students will be able to compare numbers to determine if they are greater than, less than or equal to one another.* ***Essential Questions-*** *Why is it important to know the value of numbers when comparing them?*	K.CC6-7	Dominoes	Compare numbers to show different values.	Whole Group- Role Playing Small Group- Dominoe comparisons Independent Work- Computer Games	ABCya.com
3rd Quarter	**Operations and Algebraics Thinking:** **Understanding Addition and Subtraction:** ***Enduring Understanding-*** *Students will be able to add and subtract to 10 using various media such as objects, fingers, drawing, acting out, equations, etc.* ***Essential Questions-*** *Why is it important to be able to show different ways to get answers for addition and subtraction problems?*	K.OA1-5	Timed Tests Dice Games Snap Cubes	Add and subtract using different manipulatives.	Whole Group- Acting out different story problems Small Group- Adding/Subtracting using dice, dominoes Independent Work- BINGO, Memory	Math Practice K-1

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	Measurement and Data: **Descibe and Compare Measurable attributes:** ***Enduring Understanding-*** *Students will be able to describe measurable attributes of objects and compare them to other objects.* ***Essential Questions-*** *Why is it important to compare objects and their attributes?*	K.MD1-2	Balance Rulers Nonstandard units of measurement Capacity Cups	Compare objects by describing their measurable attributes.	Whole Group- Demonstration and Modeling Small Group- Compare classroom objects Independent Work- Use nonstandard units to measure different objects	Measurement Manipulatives and containers
	Measurement and Data:					

4th Quarter	**Describe and Compare Measurable attributes:** ***Enduring Understanding-*** *Students will be able to describe measurable attributes of objects and compare them to other objects.* ***Essential Questions-*** *Why is it important to compare objects and their attributes?* **Number and Operations in Base Ten:** ***Enduring Understanding-*** *Students will be able to work with numbers 11-19 to gain foundation for place values.* ***Essential Questions-*** *Why is it important to understand place value?*	K.MD1-2 K.NBT1	Balance Rulers Nonstandard units of measurement Capacity Cups Place Value Pocket Chart Base Ten Blocks	Compare objects by describing their measurable attributes. Determine place value for numbers 11- 19.	Whole Group- Demonstration and Modeling Small Group- Compare classroom objects Independent Work- Use nonstandard units to measure different objects Whole Group- Modeling Small Group- Base Ten Blocks Indpendent Work- File Folder Games	Measurement Manipulatives and containers Progress in Math workbook

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3rd-4th Quarter	**Operation and Algebraic Thinking: Represent and Solve Problems Involving Addition and Subtraction** **Enduring Understanding:** *Students will express how to solve word problems by evaluating key words to represent a symbol of operation.* **Essential Question:** *Who does word comprehension help you solve a story problem?*	*1.OA.1*	Generate number sentence for the problem of the day Picture Books The Day Jimmy's Boa Ate the Wash to connect language development to story operation Visualization of math story problems by illustrating the operation	*Solve problems by choosing the operation and making connections to the language being used to determine the operation needed to be performed.*	**Whole:** Compose own story problems the act out the math stories by using counters, number cards or a picture. Read the problem. Write + or - and the answer. Survey what the children can do. **Small:** Model additional do subtraction stories by using felt board figures for the class. Identify the operation in math stories by using counters to classify each group and what needs to be performed to get the correct operation. **Independent: D**escribe how to figure out a math story problem by acting out the operation using students. Show the story by using a work mat and manipulatives	Mathematics Their Way Math Learning Centers Book: Five Little Monkeys Sitting in a Tree Investigations in Number, Data and Space Mathematical Thinking Snap Cubes Book: Where Jamaica Go? Book: Hey! Get Off Our Train www.teacher.mathsurf.com www.testworks.com
4th Quarter	**Enduring Understanding**: *Students will survey ways to combine three objects to find the sum.* ***Essential Question:*** *What strategies would be used to solve three whole numbers?*	*1.OA.2*	Use number cubes to practice strategies for adding three numbers. Spin a group of numbers and write the sum. Compose a strategy on how you solved the problem.	*Choose a strategy to add three numbers and can solve the problem correctly.*	**Whole:** Find sums for three addends when you toss a bean bag on a number. Write two-three strategies explaining what you did to find the answer. **Small:** Select three cards from the pile, lay them face up. Express what two numbers to add first. Answer question to explain problem-solving strategies. **Independent:** Use counters to model numbers and answer questions to get the sum of two numbers and then the third.	Scott Foresman Math For You Math Their Way Math All Around www.Peter Rabbit's Math Garden www. Parent. mathsurf.com
2nd-4th Quarter	Understand *and Apply Properties of Operations and the Relationship Between Addition and Subtraction* ***Enduring Understanding:*** *Students will turnaround or join two numbers together and add one more to get an understanding of different operations.* **Essential Question:** *Does changing the places of the numbers change the sum?*	*1.OA.3*	Produce twelve snap cubes of two different colored trains. Write the number sentence for each color group. Turnaround the groups explain what happens to understand commutative property. Subdivide a paper strip with three different colors, write a number sentence to represent the strip	*Explore the commutative and associative properties.*	**Whole:** Analyze three different items by creating a story about the items you have selected. **Small:** Recognize number sentences in a search puzzle, write the addition sentence, then write the face another way. **Independent:** Use a toss game to demonstrate turnaround facts, write sentence, count to find sum.	Scott Foresman Math For You Math Their Way Math All Around www.Peter Rabbit's Math Garden www. Parent. mathsurf.com

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2nd-4th Quarter	***Enduring Understanding:*** *Students will analyze subtraction problems by using relating addition facts to derive at a difference.* ***Essential Questions:*** *Why are related facts necessary?* *How are these number sentences alike? How are they different?*	*1.OA.4*	Use number cards or snap cubes to show related addition and subtraction sentences	Understand the relationship between addition and subtraction.	**Whole:** Compose own addition or subtraction stories another child writes the related sentences. **Small:** Use felt board pieces to write related fact sent**ences.** **Independent:** Bead link showing ten beads with two colors children write sentences.	Math Learning Centers Math Their Way Ready to Go Lessons
1st-4th Quarter	**Add and Subtract within 20.** **Enduring Understanding:** *Students will examine skip-counting of additional do subtraction by locating a given number to identify the unknown.* ***Essential Question:*** *What strategies do you use to find the missing part?*	*1.OA.5* *1.OA.8*	Explain that twelve counters are in all. Five are in this cup split out ask: How many are still under the upside down cup?	Connect ways to make numbers by finding the unknown part through 20.	**Whole:** State number of counters. Children put heads down remove some counters. Express how many were removed **Small:** Sketch a hopscotch grid to ten have one child toss a bean bag to a number the other hops to the missing number. **Independent:** Generate a large number line for the floor to ten. Have one child stand on one number another find the missing number.	Interactive Math Math Learning Centers Math Blasters
3rd-4th Quarter	***Enduring Understanding:*** *Students will memorize and support their problem-solving strategies by explaining the steps used to figure out the addition or subtraction problem.* ***Essential Question:*** *What strategy will work best to solve a number story?*	*1.OA.6*	State number stories express the problem-solving strategies to critique the parts and the number in all and write corresponding sentences.	Solve problems by applying a variety of strategies to confirm the number sentence	**Whole:** Organize story problems by using a list to solve problems **Small:** Select pictures to write a number sentence **Independent:** Draw a picture to find out the number sentence.	Math Centers Ready to Go Lessons

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	Work With Addition and Subtraction Equations	*1.OA.7*	Use a calendar picture to count the number in each	Explore the meaning of addition and subtraction.	**Whole:** Design an addition and subtraction game to help	Scott Foresman Math for You Math All Around

2nd-4th Quarter	**Enduring Understanding:** *Students will analyze subtraction and addition problems by using relating addition/subtraction facts to derive at a difference or a sum.* **Essential Questions:** *How will you determine what operation will take place? Are their key words we need to know to solve a problem?*		group, find the total or difference number sentence.		classmates practice solving problems. **Small:** Collect objects place them in groups and give a sentence related to the groups made. **Independent:** Label dominoes as numbers, listen to the operation being performed to write number sentences.	Math Centers Interactive Math
1st Quarter	**Extend the Counting Sequence** **Enduring Understanding:** *Students will be able to recognize and identify numbers from zero to one hundred twenty out of rote.* **Essential Question:** *Why is locating and labeling numbers important in solving operations.*	*1.NBT.1*	Select numbers that are missing on a chart. Illustrate what a chosen number means.	Recite numbers selected from a deck of cards	**Whole:** Organize numbers as directed on a number line. Create riddles for numbers to 120. **Small:** Transform spoken numbers into written ones. Use counters and cups to show groups of tens and extras. **Independent:** Memorize numbers from 0-100 by using flash cards and timing how fast numbers are identified. Draw a picture showing the meaning of the number.	Book: When Sheep Cannot Sleep Book: Bat Jamboree Poems Counting Songs
2nd Quarter	**Number and Operation in Base Ten: Understand Place Value** **Enduring Understanding:** *Students will be able to subdivide numbers by place value.* ***Essential Question:*** *How can numbers visually discriminate place value?*	*1.NBT.2*	Transform ones to tens and tens to hundreds by physically moving groups and changing ones to rods and rods to flats. Judge when to move groups by counting, grouping and moving.	Analyze when groups of objects should be relocated to the next place value.	**Whole:** Distinguish the value of numbers by reading and surveying where it belongs. Construct a spinner for tens and ones the use beads to show each groups **Small:** Interpret the **value of a** number by placing each integer under correct category of a three sided chart. **Independent:** Draw a picture showing place value on a chart.	Mathematics Their Way Book: One Hundred Hungry Ants Book: Too Many Tamales Book: One Hundred is a Family Poems, Chants, and Songs

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1st-2nd Quarter	***Enduring Understanding:*** *Students will be able to restate and extend a number pattern* ***Essential Question:*** *What significance does composing and analyzing number patterns have for operations?*	*1.NBT.2.B.c.*	Examine number patterns, observe what is repeated and extend the pattern. Solve the number pattern by surveying the amount of numbers between each given number.	Critique and label number patters state what you did to find the pattern.	**Whole:** Generate patterns to number cards picked by connecting pictures to solution. **Small:** Relate a number pattern after rolling a dice. **Independent:** Match number patterns to pictures shown	Mathematics Their Way Math Centers Interactive Math
1st-2nd Quarter	***Enduring Understanding:*** *Students will compare two two digit numbers and tell if they are >,=,<.* ***Essential Question:*** *How do we use symbols to compare numbers?*	*1.NBT.3*	Compare the value of numbers by placing a symbol between the numbers after placing them on a number line.	Recognize and classify numbers as being greater than, less than or equal to.	**Whole:** Make four different sets classify which group is greater, less than or equal to. **Small:** Compare sets shown with the correct sign. **Independent:** Identify a group and orally tell which set is more	Math Comparing Game Problem for the Day
2nd-3rd Quarter	**Use Place Value Understanding and Properties of Operations to Add and Subtract** **Enduring Understanding:** *Students will distinguish the locations of tens and ones in two digit numbers and restate how to apply regrouping and borrowing rules to solve an addition and subtraction problem.* **Essential Question:** *What is the highest number of ones and tens you can make? Explain your reasoning.* *Ho do you make a rod?*	*1.NBT.4*	Construct correct groups of snap cube trains of tens and accurately records the number of trains and extra.	Illustrate two digit numbers as tens and ones.	**Whole:** Sketch the amount of tens and ones of a number picked out of a bag, write that number on a place value chart. Write three things they know about tens and ones. **Small:** Solve how many tens and ones by apply a ten section work mat to visually see the numbers place value. Record on a tens /ones chart. Label how many tens and ones are showing in the drawing, document on a ten/ones chart. **Independent:** Relate the days date to a drawing of tens and ones. Connect a handful of blocks to make a rod. record how many tens and ones did you make.	Math Centers for all Skills Differentiated Math Centers

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3rd-4th Quarter	**Enduring Understanding:** *Students will combine or decrease ten more or ten less to a two digit number. Then summarize how they arrived at that number without counting.* *Essential Questions:* *Which number always changed when*	*1.NBT.5*	Express how to support number sentences when adding or subtracting ten to find a new sum or difference.	Combine a two digit number with a multiple of ten correctly and find the correct sums or difference, automatically.	**Whole:** Locate patterns on a hundreds chart to find sums mentally when they add or subtract multiplies of ten. Examine what number changed and what stayed the same. Select several dimes and pennies from a bag. Count out,	Math Blasters Math Their Way Guided Math Differentiated Math File Folder Math Games

	a ten or tens were added? *Why did the number stay the same?* *How does this strategy make it easier to add or subtract multiples of ten?*				solve the remaining story problem to find the answer. **Small:** Label amount of rods and units to establish a number sentence and answer. Generate ten rods and units on a work mat, then on a place blue chart, write the number for the rods and units then add another number that is a multiple of ten. **Independent:** Generate numbers by pulling rods and units out of the bags, then add or subtract any multiple of ten. Produce a number sentence for each group of rods and units to visualize the number that change and stayed the same.	
3rd-4th Quarter	***Enduring Understanding:*** *Students will recite multiples of ten and paraphrase how they skipped counted to get the established number.* ***Essential Question:*** *What pattern do you see when you skip count?*	*1.NBT.6*	Support skip counting by drawing a collection of ten items and record the pattern.	Produce and record a chart of multiples of tens, observe the pattern established.	**Whole:** Plan skip counting clues to help classmates guess the secret number. Count by twos and tens the different body parts of students in class. **Small:** Subdivide beans into ten sections of egg cartons, count by tens, twos and fives to observe the partners by creating an one hundred chart. **Independent:** Trace around bother hands have students recite counting by twos and tens. Draw a picture showing a collection of matching gloves. Skip count pairs of tens. Then talk about the pattern.	Math Their Way Frog Math Games Math Blasters
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3rd Quarter	**Measure Lengths Indirectly and by Iterating Length Units** **Enduring Understanding:** *Students will distinguish the length of three objects and classify them as directed.* **Essential Questions:** *What important elements are required to sort objects?* *Why is separating objects an important skill?*	1.MD.1	Discriminate several objects by attributes, length, size or shape. Design a creation that are the same sizes, shapes and attributes.	Identify shapes measurements by examine attributes.	**Whole:** Trace a shape to create a monster, rocket or other picture showing the different and similar sizes **Small:** Assemble a creation with given pre-cut shapes. **Independent:** Identify the shapes place them in order from smallest to longest.	Math Work Stations Guided Math I Have, Who Has
3rd Quarter	***Enduring Understanding:*** *Students will compare and connect subdivided parts to create a whole number of length unit.* ***Essential Questions:*** *Are all parts needed to make a whole part?* *How do parts equal to a whole part?*	1.MD.2	Identify figures divided into equal parts and determine what is needed to create the whole.	Explore the cutting apart fractions and constructing them back to a whole figure.	**Whole:** Use magazine or calendar pictures to show a given fraction. **Small:** Manipulate pattern blocks by tracing around to create a picture then divide the shape into equal parts. **Independent:** Play a fraction game matching the picture to the words that describes what you found.	Math Work Stations Math Their Way Guided Math
3rd Quarter	**Tell and Write Time:** **Enduring Understanding:** *Students will illustrate an analog clock with hands showing correct time given to the hour and half hour.* **Essential Question:** *Why is it essential to be able to understand time?*	1.MD.3	Reads time on a Judy clock to identify the hour and minute hands and write the hour and half hour.	Tell time to the hour and half hour on an analog clock.	**Whole:** Construct a large circle on the floor place numbered cards around the clock to simulate a clock, use yarn to represent hour and minute hands made different times. **Small:** Draw clock hands to show time to the hour and half hour of cut out pictures of different activities. **Independent:** Match time on analog clock to the digital clock.	Math Blasters Guided Math Math Work Stations. Poems Songs
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2nd-4th Quarter 4thQuarter	**Represent and Interpret Data:** **Enduring Understanding:** *Students will classify objects document, critique and appraise data about objects by answering questions presented.* ***Essential Question:*** *What information does a graph give us?* *How do we collect data to make a graph?*	***1.MD.4***	Create and analyze picture and, bar graph. Reinforce the connection between a pictograph and a bar graph by making one of each using the same data. Solve problems by answering the questions presented.	Graph sets of objects, interpret data by answering questions.	**Whole:** Restate a sorting rule and explain how you will use it for creating a graph. Diagram two ways to show collected data. Answer questions **Small:** Construct and analyze real objects on a graph answer questions **Independent:** Sort items and create a graph answer two questions	Graphs Galore Data is Everywhere Guided Math Information on a Graph

4th Quarter	**Geometry: Reason with Shapes and Their Attributes** **Enduring Understanding:** *Students will discriminate between two dimensional shape attributes.* ***Essential Question:*** *What Objects are placed together? Why?*	***1.G.1***	Appraise attributes to sort shapes in two ways. Explain their work.	Identify geometric solids and sort by various attributes	**Whole:** Design a graph of solids found in the real world. Plan and develop a geometric solid to analyze date by using empty boxes, towel rolls etc. **Small:** Analyze solid attributes by matching figure to words. **Independent:** Label solid shapes by placing them in a box with descriptive attributes. State the shape by identifying faces of solids and trace the faces to check the attributes.	Math a-z Mailbox for teachers Teacher Helper Math their Way
	Enduring Understanding: *Students will produce a two and three dimensional shape by combining shapes together to create a new composite shape.* **Essential Questions:** *What shape will be created when combining shapes together? How do you Know?*	***1.G.2***	Judge accurate predictions when shapes are combined together through tracing.	Identify plane shapes as a new shape with faces, edges and vertices.	**Whole:** Plan to trace faces of solids to create pictures. Diagram shapes with equal numbers of sides and corners to create a new plane figure. **Small:** Matches faces of solids to flat shapes to examine a new composite shape. **Independent:** Match figures that have the same size and shape. Develop shapes to create and match pattern designs.	Math All Around Peter Rabbit's Math Garden Math Blasters

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4th Quarter	**Enduring Understanding:** *Students will transform a whole shape into divided parts, developing an understanding that the more parts the small the share.* **Essential Questions:** *How can you tell if a shape shows fair share? What makes it a smaller share?*	*1.G.3*	Summarize how to have fair share of divided shapes by folding paper into equal parts	Distinguish cut up cheese sandwiches to have fair share, use apples to analyze smaller parts tell why.	**Whole:** Produce clay food that transforms into fair share, observe what happened to each part. Find magazine and newspaper pictures to show fractions and which is smaller, explain why. **Small:** Make puzzle from pictures cut into fractions decide the equal parts. Construct pattern block pictures to show the fraction. **Independent:** Precut rectangles subdivide by folding to create equal parts. Play a game to learn fractions draw the fraction of the shape on one card and on another card write the fraction name.	Scott Foresman Math for You Ready To Go Math Lessons Math Center That Make You Think

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Q1	**Operations & Algebraic Thinking:** ***Representing and solving problems involving addition and subtraction.*** ***Enduring Understanding-*** Understand that mathematical operations are used in solving problems in which a new value is produced from one or more values. Algebraic thinking involves choosing, combining, and applying effective strategies for answering quantitative questions. ***Essential Questions-*** In what ways can operations affect numbers? How can different strategies be helpful when solving a problem? **Number & Operations in Base Ten:** ***Understand Place Value:*** ***Enduring Understanding-*** Students will be able to work with numbers 11-19 to gain foundation for place values. ***Essential Questions-*** How does a digit's position affect its value?	2.OA.1 2.NBT.1-4	Observation Manipulatives Number Lines Number match game Place value mat activities Observation TenMarks.com Whole Number Place Value Activity	Use addition and subtraction withing 100 to solve one-and two-digit word problems by using drawnings and equations with a symbol for the unknow number to represent the problem. Read, write, compare, and understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones; along with count and skip count by 5s, 10s and 100s.	**Whole Group**-Teacher model ways to solve problems where the unknown is in various places. **Small Group**-Use manipulatives to add and subtract numbers. **Independent**-Rocket Math, File Folder Games, and Frog Systems **Whole Group**- Teacher demonstastration **Small Group**- Model using ten rods and one units **Independent**- File folder games, place value mat activities, Frog System games, and workbook pages	Progress in Math Workbooks Frog Systems Rocket Math Program Number Lines Progress in Mathematics Workbook Ten Rods and One Units Coolmath.com Tenmarks.com Frog Systems Place Value Mat/Activities Enchantedlearning.com Sir Cumference and All the King's Tens by: Cindy Neuschwander

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	Number & Operations in Base Ten: *Understand Place Value:* ***Enduring Understanding-*** Students will be able to work with numbers 11-19 to gain foundation for place values. ***Essential Questions-*** How does a digit's position affect its value?	2.NBT.1-4	Number match game Place value mat activities Observation TenMarks.com Whole Number Place Value Activity	Read, write, compare, and understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones; along with count and skip count by 5s, 10s and 100s.	**Whole Group-** Teacher demonstastration **Small Group**- Model using ten rods and one units **Independent**- File folder games, place value mat activities, Frog System games, and workbook pages	Progress in Mathematics Workbook Ten Rods and One Units Coolmath.com Tenmarks.com Frog Systems Place Value Mat/Activities Enchantedlearning.com Sir Cumference and All the King's Tens by: Cindy Neuschwander
	Operations & Algebraic Thinking: *Fluently add and subtract within 20* ***Enduring Understanding-*** Understand that algebraic thinking involves choosing, combining and applying effective strategies for answering quantitative questions. ***Essential Questions -*** How can different strategies be helpful in learning the basic facts?	2.OA.2	Times Tests Observation Manipulatives	Fluently add and subtract within 20 using mental strategies.	**Whole Group**-Modeling different strategies **Small Group**-Adding and subtracting using manipulatives **Independent**-Rocket Math, Memory	Progress in Math Workbooks Rocket Math Program Flash Cards
	Number & Operations in Base Ten: *Use place value understanding and properties of operations to add and subtract:* ***Enduring Understanding-*** Understanding place value can lead to number sense and efficient strategies for computing with numbers. ***Essential Questions-*** How does a digit's position affect its value?	2.NBT.5-9	Addition frame activities Tenmarks.com Student skits Manipulatives TenMarks.com	Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction. Add up to four two-digit numbers using strategies based on place value and properties of operations. 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 Mentally add 10 or 100 to a given number 100–900, and mentally subtract 10 or 100 from a given number 100–900. Explain why addition and subtraction strategies work, using	**Whole Group**- Teacher model **Small Group**- Addition frames, Ten Rods and One Units **Independent**-Computer games	Progress in Mathematics Workbooks Coolmath.com Tenmarks.com Place Value Mat/Activities EnchantedLearning.com

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	Measurement and Data: *Represent and interpret data:* ***Enduring Understanding-*** Data displays describe and represent data in alternative ways. ***Essential Questions-*** Why display data in different ways?	2.MD.9-10	Frog Systems Ice Cream Survey and graph Graphing activities TenMarks	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. 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	**Whole Group**: Mini-Lesson on graphs/data, Class survey **Small Group:** Tiger Math book and related activities, frog systems **Independent:** Data and Graphing activities, computer activities	EnchantedLearning.com Coolmath.com Tiger Math by: Nagda & Bickel Frog Systems TenMarks.com

				together, take-apart, and compare problems4 using information presented in a bar graph.		
Q2	**Number & Operations in Base Ten:** *Understand Place Value:* ***Enduring Understanding-*** Students will be able to work with numbers 11-19 to gain foundation for place values. ***Essential Questions-*** How does a digit's position affect its value?	2.NBT.1-4	Number match game Place value mat activities Observation TenMarks.com Whole Number Place Value Activity	Read, write, compare, and understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones; along with count and skip count by 5s, 10s and 100s.	**Whole Group**- Teacher demonstatration **Small Group**- Model using ten rods and one units **Independent**- File folder games, place value mat activities, Frog System games, and workbook pages	Progress in Mathematics Workbook Ten Rods and One Units Coolmath.com Tenmarks.com Frog Systems Place Value Mat/Activities Enchantedlearning.com Sir Cumference and All the King's Tens by: Cindy Neuschwander

Timeline	Themes/Enduring Understandings/Essential Questions for the Unit	Common Core Standards Addressed	Assessments	Standards Based Skills and Concepts Targeted	Strategies/Practices Used to Teach Skills and Concepts	Resources/Texts Used
	Number & Operations in Base Ten: *Understand Place Value:* ***Enduring Understanding-*** Students will be able to work with numbers 11-19 to gain foundation for place values. ***Essential Questions-*** How does a digit's position affect its value?	2.NBT.1-4	Number match game Place value mat activities Observation TenMarks.com Whole Number Place Value Activity	Read, write, compare, and understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones; along with count and skip count by 5s, 10s and 100s.	**Whole Group**- Teacher demonstatration **Small Group**- Model using ten rods and one units **Independent**- File folder games, place value mat activities, Frog System games, and workbook pages	Progress in Mathematics Workbook Ten Rods and One Units Coolmath.com Tenmarks.com Frog Systems Place Value Mat/Activities Enchantedlearning.com Sir Cumference and All the King's Tens by: Cindy Neuschwander
	Operations & Algebraic Thinking: *Fluently add and subtract within 20* ***Enduring Understanding-*** Understand that algebraic thinking involves choosing, combining and applying effective strategies for answering quantitative questions. ***Essential Questions*** -How can different strategies be helpful in learning the basic facts?	2.OA.2	Times Tests Observation Manipulatives	Fluently add and subtract within 20 using mental strategies.	**Whole Group**-Modeling different strategies **Small Group**-Adding and subtracting using manipulatives **Independent**-Rocket Math, Memory	Progress in Math Workbooks Rocket Math Program Flash Cards
	Number & Operations in Base Ten: *Use place value understanding and properties of operations to add and subtract:* ***Enduring Understanding-*** Understanding place value can lead to number sense and efficient strategies for computing with numbers. ***Essential Questions-*** How does a digit's position affect its value?	2.NBT.5-9	Addition frame activities Tenmarks.com Student skits Manipulatives TenMarks.com	Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction. Add up to four two-digit numbers using strategies based on place value and properties of operations. 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 Mentally add 10 or 100 to a given number 100–900, and mentally subtract 10 or 100 from a given number 100–900. Explain why addition and subtraction strategies work, using	**Whole Group**- Teacher model **Small Group**- Addition frames, Ten Rods and One Units **Independent**-Computer games	Progress in Mathematics Workbooks Coolmath.com Tenmarks.com Place Value Mat/Activities EnchantedLearning.com

Timeline	Themes/Enduring Understandings/Essential Questions for the Unit	Common Core Standards Addressed	Assessments	Standards Based Skills and Concepts Targeted	Strategies/Practices Used to Teach Skills and Concepts	Resources/Texts Used
	Measurement and Data: *Represent and interpret data:* ***Enduring Understanding-*** Data displays describe and represent data in alternative ways. ***Essential Questions-*** Why display data in different ways?	2.MD.9-10	Frog Systems Ice Cream Survey and graph Graphing activities TenMarks	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. 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 problems4 using information presented in a bar graph.	**Whole Group**: Mini-Lesson on graphs/data, Class survey **Small Group**: Tiger Math book and related activities, frog systems **Independent:** Data and Graphing activities, computer activities	EnchantedLearning.com Coolmath.com Tiger Math by: Nagda & Bickel Frog Systems TenMarks.com
Q3	**Number & Operations in Base Ten:** *Understand Place Value:* ***Enduring Understanding-*** Students will be able to work with numbers 11-19 to gain foundation for place values. ***Essential Questions-*** How does a digit's position affect its value?	2.NBT.1-4	Number match game Place value mat activities Observation TenMarks.com Whole Number Place Value Activity	Read, write, compare, and understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones; along with count and skip count by 5s, 10s and 100s.	**Whole Group**- Teacher demonstatration **Small Group**- Model using ten rods and one units **Independent**- File folder games, place value mat activities, Frog System games, and workbook pages	Progress in Mathematics Workbook Ten Rods and One Units Coolmath.com Tenmarks.com Frog Systems Place Value Mat/Activities Enchantedlearning.com

	Operations & Algebraic Thinking: *Fluently add and subtract within 20* ***Enduring Understanding-*** Understand that algebraic thinking involves choosing, combining and applying effective strategies for answering quantitative questions. ***Essential Questions*** -How can different strategies be helpful in learning the basic facts?	2.OA.2	Times Tests Observation Manipulatives	Fluently add and subtract within 20 using mental strategies.	**Whole Group**-Modeling different strategies **Small Group**-Adding and subtracting using manipulatives **Independent**-Rocket Math, Memory	Sir Cumference and All the King's Tens by: Cindy Neuschwander Progress in Math Workbooks Rocket Math Program Flash Cards
Timeline	**Themes/Enduring Understandings/Essential Questions for the Unit**	**Common Core Standards Addressed**	**Assessments**	**Standards Based Skills and Concepts Targeted**	**Strategies/Practices Used to Teach Skills and Concepts**	**Resources/Texts Used**
	Number & Operations in Base Ten: *Use place value understanding and properties of operations to add and subtract:* ***Enduring Understanding-*** Understanding place value can lead to number sense and efficient strategies for computing with numbers. ***Essential Questions-*** How does a digit's position affect its value?	2.NBT.5-9	Addition frame activities Tenmarks.com Student skits Manipulatives TenMarks.com	Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction. Add up to four two-digit numbers using strategies based on place value and properties of operations. 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 Mentally add 10 or 100 to a given number 100–900, and mentally subtract 10 or 100 from a given number 100–900. Explain why addition and subtraction strategies work, using place value and the properties of operations	**Whole Group**- Teacher model **Small Group**- Addition frames, Ten Rods and One Units **Independent**-Computer games	Progress in Mathematics Workbooks Coolmath.com Tenmarks.com Place Value Mat/Activities EnchantedLearning.com
	Measurement and Data: *Represent and interpret data:* ***Enduring Understanding-*** Data displays describe and represent data in alternative ways. ***Essential Questions-*** Why display data in different ways?	2.MD.9-10	Frog Systems Ice Cream Survey and graph Graphing activities TenMarks	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. 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 problems4 using information presented in a bar graph.	**Whole Group:** Mini-Lesson on graphs/data, Class survey **Small Group:** Tiger Math book and related activities, frog systems **Independent**: Data and Graphing activities, computer activities	EnchantedLearning.com Coolmath.com Tiger Math by: Nagda & Bickel Frog Systems TenMarks.com
Timeline	**Themes/Enduring Understandings/Essential Questions for the Unit**	**Common Core Standards Addressed**	**Assessments**	**Standards Based Skills and Concepts Targeted**	**Strategies/Practices Used to Teach Skills and Concepts**	**Resources/Texts Used**
	Measurement & Data: *Measure and estimate lengths in standard units* ***Enduring Understanding-*** Measurement processes are used in everyday life to describe and quantify the world. ***Essential Questions-*** Why does "what" we measure influence "how" we measure?	2.MD1-4	Measurement activities Sorting How to use a rule How Long is it? Activity How Tall is it? Activity	Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes. 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. Estimate lengths using units of inches, feet, centimeters, and meters. Measure to determine how much longer one object is than another, expressing the length difference in terms of a standard length unit.	**Whole Group**-Arrange students based on height **Small Group**- Estimate and compare actual length of an object **Independent**- Arrange objects based on length	Progress in Mathematics Workbook Coolmath.com How Big is a Foot by: Rolf Myller EnchantedLearning.com
	Measurement & Data: *Relate addition and subtraction to length:* ***Enduring Understanding-*** We can use our knowledge of addition and subtraction to solve problems involving lengths. ***Essential Questions-*** How can we use one measuring tool to determine how much longer one object is than another? How can number lines and rulers be used to find sum and difference?	2.MD.5-6	Centers Comparing objects How Big Was That Dinosaur Activity	Use addition and subtraction within 100 to solve word problems involving lengths that are given in the same units, e.g., by using drawings (such as drawings of rulers) and equations with a symbol for the unknown number to represent the problem. 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.	**Whole Group-** Teacher modeling and demonstration **Small Group**-Compare lengths of objects **Independent**- Use different units to measure items	Progress in Mathematics Workbooks Coolmath.com Enchantedlearning.com How Big Was That Dinosaur Activity

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	Geometry: *Reason with shapes and thier attributes* ***Enduring Understanding-*** Students will be able to analyze, compare, create, compose, identify and describe shapes. ***Essential Questions-*** Why is it important to be able to identify shapes and their attributes?	2.G.1-3	How Many Colorful Shapes? Book Tanagrams Shape chart shape Identification My Shape Book	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. Partition a rectangle into rows and columns of same-size squares and count to find the total number of them. 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.	**Whole Group**: Classroom I Spy, teacher lead mini-lesson **Small Group:** Tanagrams, sorting/grouping, My Shape Book **Independent:** Shape idenification, shape chart, How Many Colorful Shapes? Book	Progress in Mathematics Workbooks Coolmath.com Enchantedlearning.com Tanagrams
	Measurement & Data: *Work with time and money* : ***Enduring Understanding-*** Time is essential to making daily decisions. Knowing the value of coins and dollars will help in real world situations. ***Essential Questions-*** How does knowledge of time support your daily life? How does an understanding of the value of money solve problems?	2.MD.7-8	Paperpate clock project Counting Coins Activity Matching worksheet Value of a coin activity Time matching activity Cloze Activity	Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m. Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using $ and ¢ symbols appropriately. Example: If you have 2 dimes and 3 pennies, how many cents do you have?	**Whole Group:** ClockMonsters.com activity and I have/Who has game **Small Group:** Count Coins, What Times is it Mr. Fox, matching activity **Independent:** Match coin to values, clock project, computer games, cloze activity	I have/Who has activity Clockmonsters.com Paperplate Clocks EnchantedLearning.com Coolmath.com abcya.com

Timeline	Themes/Enduring Understandings/Essential Questions for the Unit	Common Core Standards Addressed	Assessments	Standards Based Skills and Concepts Targeted	Strategies/Practices Used to Teach Skills and Concepts	Resources/Texts Used
Q4	**Number & Operations in Base Ten:** *Use place value understanding and properties of operations to add and subtract:* ***Enduring Understanding-*** Understanding place value can lead to number sense and efficient strategies for computing with numbers. ***Essential Questions-*** How does a digit's position affect its value?	2.NBT.5-9	Addition frame activities Tenmarks.com Student skits Manipulatives TenMarks.com	Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction. Add up to four two-digit numbers using strategies based on place value and properties of operations. 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 Mentally add 10 or 100 to a given number 100–900, and mentally subtract 10 or 100 from a given number 100–900. Explain why addition and subtraction strategies work, using place value and the properties of operations	**Whole Group**- Teacher model **Small Group**- Addition frames, Ten Rods and One Units **Independent**-Computer games	Progress in Mathematics Workbooks Coolmath.com Tenmarks.com Place Value Mat/Activities EnchantedLearning.com

Timeline	Themes/Enduring Understandings/Essential Questions for the Unit	Common Core Standards Addressed	Assessments	Standards Based Skills and Concepts Targeted	Strategies/Practices Used to Teach Skills and Concepts	Resources/Texts Used
	Measurement and Data: *Represent and interpret data:* ***Enduring Understanding-*** Data displays describe and represent data in alternative ways. ***Essential Questions-*** Why display data in different ways?	2.MD.9-10	Frog Systems Ice Cream Survey and graph Graphing activities TenMarks	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. 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 problems4 using information presented in a bar graph.	**Whole Group**: Mini-Lesson on graphs/data, Class survey **Small Group:** Tiger Math book and related activities, frog systems **Independent:** Data and Graphing activities, computer activities	EnchantedLearning.com Coolmath.com Tiger Math by: Nagda & Bickel Frog Systems TenMarks.com
	Operations & Algebraic Thinking: *Fluently add and subtract within 20* ***Enduring Understanding-*** Understand that algebraic thinking involves choosing, combining and applying effective strategies for answering quantitative questions. ***Essential Questions -*** How can different strategies be helpful in learning the basic facts?	2.OA.2	Times Tests Observation Manipulatives	Fluently add and subtract within 20 using mental strategies.	**Whole Group**-Modeling different strategies **Small Group**-Adding and subtracting using manipulatives **Independent**-Rocket Math, Memory	Progress in Math Workbooks Rocket Math Program Flash Cards
	Measurement & Data: *Work with time and money:* ***Enduring Understanding-*** Time is essential to making daily decisions. Knowing the value of coins and dollars will help in real world situations. ***Essential Questions-*** How does knowledge of time support your daily life? How does an understanding of the value of money solve problems?	2.MD.7-8	Paperpate clock project Counting Coins Activity Matching worksheet Value of a coin activity Time matching activity Cloze Activity	Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m. Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using $ and ¢ symbols appropriately. Example: If you have 2 dimes and 3 pennies, how many cents do you have?	**Whole Group:** ClockMonsters.com activity and I have/Who has game **Small Group**: Count Coins, What Times is it Mr. Fox, matching activity **Independent**: Match coin to values, clock project, computer games, cloze activity	I have/Who has activity Clockmonsters.com Paperplate Clocks EnchantedLearning.com Coolmath.com abcya.com

Timeline	Themes/Enduring Understandings/Essential Questions for the Unit	Common Core Standards Addressed	Assessments	Standards Based Skills and Concepts Targeted	Strategies/Practices Used to Teach Skills and Concepts	Resources/Texts Used
	Operations & Algebraic Thinking: *Work with equal groups of objects to gain foundations for multipication* ***Enduring Understanding-*** Mathematical operations are used in solving problems in which a new value is produced from one or more values. Algebraic thinking involves choosing, combining, and applying effective strategies for answering quantitative questions. ***Essential Questions-*** In what ways can operations affect numbers?	2.OA.3-4	Sorting Counting by 2's Centers	Determine whether a group of objects (up to 20) has an even or an odd number of members. Using addition to find the total number of objects in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal addends.	**Whole Group**-Demonstration and modeling, counting by 2's **Small Group**-Group/sort objects **Independent**-Center, TenMarks	Progress in Math Workbook Center Activities TenMarks.com Coolmath.com

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Quarter 1	Theme: Understand Place Value to perform operations of addition and subtraction on multi digit numbers. Enduring Understandings * fluently adding and subtracting numbers up to three digits * use place value understanding to round whole numbers to the nearest ten or one hundred Essential Questions * Why is it important to memorize the basic math facts? * How	3.NBT.1 3.NBT.2 3.0A.8	Summative Assessment (end of unit) * assessment at the end of the unit *concepts include addition, subtraction and rounding Formative Assessments (during unit) *weekly quiz checks *informal assessments through activities completed in	*understand relationship between addition and subtraction *use strategies and algorithms *identify place value up to thousands *identify properties of operations *know basic addition and subtraction math facts 0-10 *estimation *mental math (addition and subtraction)	* basic operations flash cards * math drills * activities using various materials such as white board, smart board, etc. * worksheets	* www.tenmarks.com * national library of manipulatives website *math-drills.com *mathworksheetforkids.com *coolmath-games.com *textbook *various games & manipulatives *smart board
Quarter 2	**Theme:** Use multiplication and division to solve problems **Enduring Understandings** * understand relationship between multiplication and division *multiply and divide within 100 *identify patterns *understand the properties of multiplication and division **Essential Questions** *****How does the understanding of multiplication and division solve problems in daily life?	3.0A.1, 3.0A.2, 3.0A.3, 3.0A.4, 3.0A.5, 3.0A.6, 3.0A.7, 3.0A.8, 3.0A.9	Summative Assessment (end of unit) * assessment at the end of the unit *concepts include multiplication and division Formative Assessments (during unit) *weekly quiz checks *informal assessments through activities completed in class (ex: bingo, math drills, around the world, etc...)	* basic multiplication and division facts within 100 * solving missing factors * use drawings & manipulatives to demonstrate properties of division and multiplication problems. *solve two step problem with division and multiplication	* basic operations flash cards * math drills * activities using various materials such as white board, smart board, etc. * worksheets * math fact families * rocket math *	* www.tenmarks.com * national library of manipulatives website *math-drills.com *mathworksheetforkids.com *coolmath-games.com *textbook *various games & manipulatives *smart board
Quarter 3	**Theme:** * Represent and interpret data * solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects *understands concepts of area and perimeter **Enduring Understandings** * Understands how to tell time and when it is useful * read, interpret and be able to draw various graphs to represent data * understand measurable attributes of liquid, volume, and mass **Essential Questions** * How does arranging data into graphs make it easier to understand the information? * How does measurement and time keep our world organized?	3.MD.1, 3.MD.2, 3.MD.3, 3.MD.4, 3.MD.5, 3.MD.6, 3.MD.7, 3.MD.8	Summative Assessment Collecting Data Assessment with provided information Formative Assessments *activities with collecting data and drawing graphs to represent that data *Informal activity with telling time using small clocks * Learning Centers	* determine which standard unit to use when measuring various objects *elapsed time to the minute *know relationship among units of time *able to draw and interpret pictographs and bar graphs *tell and write time to the minute *be able to use digital and standard clocks *solve comparison problems using a graph	*practice telling time using small and big clock * use smart board to make bar graphs with data from class *measurement activity using a ruler *make a line plot from information	* national library of manipulatives website * textbook *mathworksheets4kids.com *homeschoolmath.net *tenmarks.com *math-drills.com
Quarter 4	**Theme:** *develop understanding of fractions as numbers *reason with shapes and their attributes **Enduring Understanding** * objects can be described and compared using their geometric attributes *understand the importance of the use of fractions in our everyday lives **Essential Questions** * How can fractions be modeled, ordered and compared? * How do we use geometry to make sense of the world?	3.G.1, 3.G.2, 3.NF.1, 3.NF.2, 3.NF.3	Summative Assessment *end of unit assessment Formative Assessment *games/ manipulatives *hold up shapes and have students identify on their white boards *weekly quizzes	*understand fractions as division of two whole numbers. * identify fractions as part of a whole, part of a set, part of an area, and locations on the number line * read and write symbolic notation for unit fractions and common fractions *recognize and name equivalent fractions * understand properties of polygons (ex: closed, straight, flat/2-dimensional) *identify and draw quadrilaterals (ex: square, rectangle, parallelogram, rhombus, trapezoid)	*fraction manipulatives *games & manipulatives *pizza activity	* www.tenmarks.com * national library of manipulatives website *math-drills.com *mathworksheetforkids.com *coolmath-games.com *textbook *various games & manipulatives *smart board

Timeline	Themes/Enduring Understandings/Essential Questions for the Unit	Common Core Standards Addressed	Assessments	Standards Based Skills and Concepts Targeted	Strategies/Practices Used to Teach Skills and Concepts	Resources/Texts Used
Quarter 1	Theme: Understand Place Value to perform the the four operations to solve problems Enduring Understandings * fluently adding, subtracting, multiplying and dividing basic facts * use place value understanding to round multi digit whole numbers to any place Essential Questions * Why is it important to memorize the basic math facts? * How does the understanding of place value help in problem solving?	4.OA.1 4.OA.2 4.OA.3 4.NBT.1 4.NBT.2 4.NBT.3	Summative Assessment (end of unit) * assessment at the end of the unit *concepts include addition, subtraction, multiplication, division and rounding Formative Assessments (during unit) *weekly quiz checks *informal assessments through activities completed in class (ex: bingo, math drills, around the world, etc...) * Weekly Timings	*understand relationship between addition and subtraction and between multiplication and division *use strategies and algorithms to solve multi digit problems * use understanding of place value for rounding multi digit numbers to any place and comparing them *identify properties of operations *know basic multiplication and division math facts 0-10 * generate a pattern that follows a rule * know all factors of whole numbers of 1-100	* basic operations flash cards * math drills * activities using various materials such as white board, smart board, etc. * worksheets	* www.tenmarks.com * national library of manipulatives website *math-drills.com *mathworksheetforkids.com *coolmath-games.com *textbook *various games & manipulatives *smart board
Quarter 2	**Theme:** Extend understanding of comparing fractions and decimals **Enduring Understandings** * generalize the 4 operations from whole numbers to fractions and decimals **Essential Questions** *****How does the understanding of fractions and decimals help solve problems in daily life?	4.NF.1, 4.NF.2, 4.NF.3, 4.NF.4, 4.NF.5, 4.NF.6, 4.NF.7	Summative Assessment (end of unit) * assessment at the end of the unit *concepts include fractions and decimals Formative Assessments (during unit) *weekly quiz checks *informal assessments through activities completed in class (ex: bingo, math drills, around the world, etc...) * Weekly Timings	* recognize and generate equivalent fractions * comparing fractions with different numerators and denominators * apply understanding of whole number operations to fractions and decimals. * use decimal notation for fractions with detonators 10 or 100 * compare two decimals to hundredths	* basic operations flash cards * math drills * activities using various materials such as white board, smart board, etc. * worksheets * fractions pizzas (manipulative) * multifunction white board with all decimal places labeled and fractions on the other side	* www.tenmarks.com * national library of manipulatives website *math-drills.com *mathworksheetforkids.com *coolmath-games.com *textbook *various games & manipulatives *smart board
Quarter 3	**Theme:** * Represent and interpret data **Enduring Understandings** * understanding measurement and conversion within one system of units * interpret line plots with fractions **Essential Questions** ***** How does arranging data into a line plot make it easier to understand the information? ***** How does measurement and time keep our world organized?	4.MD.1, 4.MD.2, 4.MD.3, 4.MD.4, 4.MD.5, 4.MD.6, 4.MD.7	Summative Assessment Formative Assessments *activities with collecting data and drawing graphs to represent that data * Learning Centers	* know relative sizes of measurement units *elapsed time to the minute *know relationship among units of time *able to draw and interpret pictographs and bar graphs * use the four operations to save word problems involving measurement * make a line plot to show the measurements in fractions of a unit * solve problems involving measurement and conversion between larger and smaller units	* use smart board to make line plot with data from class *measurement review activity using a ruler *make a line plot with whole numbers or fractions	* national library of manipulatives website * textbook *mathworksheets4kids.com *homeschoolmath.net *tenmarks.com *math-drills.com
Quarter 4	**Theme:** *classify shapes by properties *measure and identify lines and angles **Enduring Understanding** * objects can be described and compared using their geometric attributes *understand angle measurements **Essential Questions** * How do we use geometry to make sense of the world?	4.G.1, 4.G.2, 4.G3, 4.MD.5, 4.MD.6, 4.MG.7	Summative Assessment *end of unit assessment Formative Assessment *games/ manipulatives *use small whiteboards to draw and identify shapes and angles *weekly quizzes	* draw points, lines, line segments, rays, angles and perpendicular and parallel lines * classify two dimensional figures by properties * recognize and draw lines of symmetry * use a protector to measure and draw angles in whole number degrees *solve addition and subtraction problems with angles	* geometry manipulatives * big set of geometry tools	* www.tenmarks.com * national library of manipulatives website *math-drills.com *mathworksheetforkids.com *coolmath-games.com *textbook *various games & manipulatives *smart board

Timeline	Themes/Enduring Understandings/Essential Questions for the Unit	Common Core Standards Addressed	Assessments	Standards Based Skills and Concepts Targeted	Strategies/Practices Used to Teach Skills and Concepts	Resources/Texts Used
Quarter 1	Theme: Understand Place Value in interpreting numerical expressions Enduring Understandings * use place value understanding to round decimals to any place * recognize the patterns of numbers of zeros when multiplying or dividing by a power of ten * increase fluency of solving multiplication and division problems with larger numbers Essential Questions * How does the understanding of place value help in problem solving? * How does the ability to analyze patterns and relationships help us make sense of the	5.OA.1, 5.OA.2, 5.OA.3, 5.NBT.1, 5.NBT.2, 5.NBT.3, 5.NBT.4, 5.NBT.5, 5.NBT.6, 5.NBT.7	Summative Assessment (end of unit) * assessment at the end of the unit *concepts include multiplying and dividing larger numbers Formative Assessments (during unit) *weekly quiz checks *informal assessments through activities completed in class (ex: bingo, math drills, around the world, etc...) * Weekly Timings	* add and subtract fractions with unlike denominators including mixed numbers. * solve real word problems involving addition, subtraction multiplication, and division with fractions and mixed numbers * interpret a fraction as division of the numerator by the denominator * multiply a fraction or whole number by a fraction * interpret multiplication as scaling	* math drills * activities using various materials such as white board, smart board, etc. * worksheets	* www.tenmarks.com * national library of manipulatives website *math-drills.com *mathworksheetforkids.com *coolmath-games.com *textbook *various games & manipulatives *smart board
Quarter 2	**Theme:** Extend understanding of fraction concepts **Enduring Understandings** * use equivalent fractions as a strategy to add, subtract, multiply and divide fractions **Essential Questions** *****How does the ability to manipulate fractions help solve problems in daily life?	5.NF1, 5.NF2, 5.NF3, 5.NF4, 5.NF5, 5.NF6 5.NF7	Summative Assessment (end of unit) * assessment at the end of the unit *concepts include fractions Formative Assessments (during unit) *weekly quiz checks *informal assessments through activities completed in class (ex: bingo, math drills, around the world, etc...) * Weekly Timings	* recognize and generate equivalent fractions * comparing fractions with different numerators and denominators * apply understanding of whole number operations to fractions and decimals. * use decimal notation for fractions with detonators 10 or 100 * compare two decimals to hundredths	* fraction games * fraction strips/pies/blocks & other manipulatives * activities using various materials such as white board, smart board, etc. * worksheets	* www.tenmarks.com * national library of manipulatives website *math-drills.com *mathworksheetforkids.com *coolmath-games.com *textbook *various games & manipulatives *smart board
Quarter 3	**Theme:** * develop understanding of fractions as numbers for conversion and data representation **Enduring Understandings** ***** understanding measurement and conversion within one system of units *understand concepts of volume measurement **Essential Questions** ***** How does arranging data into a line plot make it easier to understand the information? ***** How does measurement and time keep our world organized?	5.MD.1, 5.MD.2, 5.MD.3, 5.MD.4, 5.MD.5	Summative Assessment *end of unit assessment *data project Formative Assessments *activities with collecting data and drawing line plots to represent that data * Learning Centers *Quiz *Partner activity	* solve multi-step real world problems involving converting standard measurement within one measurement system * represent and interpret data * make a line plot to display a set of information * recognize volume attributes *measure volume by counting unit cubes *use volume formulas to solve for various shapes including rectangular prism	* use smart board to make line plot with data from class *measurement review activity using a ruler *use cube manipulatives to practice solving mathematical problems involving volume.	* national library of manipulatives website * textbook *mathworksheets4kids.com *homeschoolmath.net *tenmarks.com *math-drills.com
Quarter 4	**Theme:** *classify two dimensional figures **Enduring Understanding** * objects can be described and compared using their geometric attributes *understand angle measurements **Essential Questions** * How do we use geometry to make sense of the world?	5.G.1, 5.G.2, 5.G.3, 5.G.4	Summative Assessment *end of unit assessment Formative Assessment *games/ manipulatives *use graph paper to graph points on an x and y axis *weekly quizzes	* classify two dimensional figures by properties * represent real world and mathematical problems by graphing points	* geometry manipulatives * big set of geometry tools	* www.tenmarks.com * national library of manipulatives website *math-drills.com *mathworksheetforkids.com *coolmath-games.com *textbook *various games & manipulatives *smart board *small white boards *graph paper

Timeline	Themes/Enduring Understandings/Essential Questions for the Unit	Common Core Standards Addressed	Assessments	Standards Based Skills and Concepts Targeted	Strategies/Practices Used to Teach Skills and Concepts	Resources/Texts Used
	Theme:	**Standards:**	**Pre-assessment:**	**Concepts targeted:**	**Strategies:**	**Resources**
	1. How to do we use		Quiz involving the	1. Exponentiation	1. PowerPoint presentations	http://aaamath.com/
	patterns to understand		following topics:	2. Dividing fractions	2. Lecture style class.	http://www.funbrain.com/brain/MathBrain/MathBrain.html
	fractions.		1. Adding/subtracting	3. Algebraic expressions	3. Group work	http://math-play.com/6th-grade-math-games.html
	2. Fraction division.	6.NS.2	multiplying/dividing	4. one variable equation	to practice problems	national library of virtual manipulative
	3. What does a fraction	6.NS.3	rational numbers	5. evaluating expressions given	4. Visual presentations	Khan Academy Website
	quotient look like?	6.NS.1	2. Identify what absolute	a certain value.	to understand how	
1st Quarter	4. Exponents	6.EE.1	value means		negatives and positives	text book (one that follows common core standards)
	5. Introduction to	6.EE.2	3. Stating rules		are opposite.	
	algebra.	6.EE.5	for adding rational			
	6. Algebraic expressions.	6.EE.6	numbers			
	7. One variable equations	6.NS.4	4. using number			
	and inequalities.		properties to solve			
	8. Evaluate expressions		problems.			
	at specific values.					
			Formative assessment:			
			1. Quizzes on the topics			
			listed above.			
			2. Homework assignments			
			involving topics			
			mentioned above			
			3. Worksheets dealing			
			with aforementioned			
			topics			
			Summative assessment:			
			1. Test on topics above			
			2. Creating word problems			
			that make use of the topics			
			mentioned above.			
	Themes:	**Standards:**	**Pre-assessment:**	**Concepts targeted:**	**Strategies**	**Resources:**
	1. How do we plot		Quiz involving the	1. Knowing how to plot	1. PowerPoint presentations	http://aaamath.com/
	rational numbers on	6.NS.6	following topics:	numbers on the number line.	2. Lecture style class.	http://www.funbrain.com/brain/MathBrain/MathBrain.html
	a number line?	6.EE.3	1. Adding/subtracting	2. Determining if two	3. Group work	http://math-play.com/6th-grade-math-games.html
	2. Equivalent expressions.	6.EE.4	multiplying/dividing	expressions are equal	to practice problems	national library of virtual manipulative
	3. Draw geometric shapes	6.G.3	rational numbers	3. find area of shapes given	4. Visual presentations	Khan Academy Website
	in a coordinate plane and	6.NS.5	2. Identify what absolute	their verticies.	to understand how	
	given vericies find the	6.NS.7	value means	4. manipulating positive and	negatives and positives	text book (one that follows common core standards)
	area of the shape.	6.EE.7	3. Stating rules	negative numbers.	are opposite.	
	4. Positive and negative	6.NS.8	for adding rational	6. Absolute values.		
	numbers.		numbers	7. solving for an equation for		
2nd Quarter	5. Absolute values.		4. using number	8. graph real world problems in		
	6. What does absolute		properties to solve	the coordinate plane.		
	value define?		problems.			
	7. Solving an equation/					
	inequality for a variable.		**Formative assessment:**			
	8. Solve real world		1. Quizzes on the topics			
	problems by graphing in		listed above.			
	the coordinate plane.		2. Homework assignments			
			involving topics			
			mentioned above			
			3. Worksheets dealing			
			with aforementioned			
			topics			
			Summative assessment:			
			1. Test on topics above			
			2. Creating word problems			
			that make use of the topics			
			mentioned above.			
	Themes:	**Standards:**	**Pre-assessment:**	**Concepts targeted:**	**Strategies:**	**Resources:**
	1. Find area of different		Quiz involving the	1. Finding the area of triangles.	1. PowerPoint presentations	http://aaamath.com/
	types of triangles.	6.G.1	following topics:	2. finding areas of quadrilaterals	2. Lecture style class.	http://www.funbrain.com/brain/MathBrain/MathBrain.html
	2. Decomposing	6.G.2	1. Adding/subtracting	and polygons by dividing them	3. Group work	http://math-play.com/6th-grade-math-games.html
	quadrilaterals and	6.G.4	multiplying/dividing	into different geometric shapes.	to practice problems	national library of virtual manipulative
	polygons into triangles	6.G.3	rational numbers	3. find volume of rectangular	4. Visual presentations	Khan Academy Website
	and other shapes to find	6.RP.1	2. Identify what absolute	prisms that don't have whole	to understand how	
	their area.	6.RP.2	value means	number side measurements.	negatives and positives	text book (one that follows common core standards)
3rd Quarter	3. Find the volume of	6.RP.3	3. Stating rules	4. drawing and finding the area	are opposite.	
	rectangular prisms that	6.SP.1	for adding rational	of geometric shapes given their		
	have non-whole number	6.SP.2	numbers	vertices.		
	side measurements.		4. using number	5. calculating ratios.		
	4. Represent 3-D shapes		properties to solve	6. calculating unit rates.		
	made up of different		problems.	7. anticipate variability in data		
	2-D shapes.			8. use center, shape, and spread		
	5. Draw geometric shapes		**Formative assessment:**	to describe data.		
	in a coordinate plane, and		1. Quizzes on the topics			
	given vertices find the		listed above.			
	area of the shape.		2. Homework assignments			
	6. Ratios/ ratio relationships		involving topics			
	7. Unit rates		mentioned above			
	8. Ratio/rate reasoning		3. Worksheets dealing			
	using tables, tape diagrams,		with aforementioned			
	double number lines,		topics			
	or equations.					
	9. Recognize statistical		**Summative assessment:**			
	questions that anticipate		1. Test on topics above			
	variability in data.		2. Creating word problems			
	10. Collect and describe data		that make use of the topics			
	by its center, spread, and		mentioned above.			
	overall shape.					

	Theme:	**Standards:**	**Pre-assessment:**	**Concepts targeted:**	**Strategies:**	**Resources:**
	1. Differences between		Quiz involving the	1. understand the difference	1. PowerPoint presentations	http://aaamath.com/
	range and center.	6.SP.3	following topics:	between range and center.	2. Lecture style class.	http://www.funbrain.com/brain/MathBrain/MathBrain.html
	2. Display data on	6.SP.4	1. Adding/subtracting	2. create numbers lines,	3. Group work	http://math-play.com/6th-grade-math-games.html
	number lines, histograms,	6.SP.5	multiplying/dividing	histograms, box plots, and	to practice problems	national library of virtual manipulative
	box plots, and dot plots.	6.EE.8	rational numbers	dot plots given certain data.	4. Visual presentations	Khan Academy Website
	3. Summarize data sets in	6.EE.9	2. Identify what absolute	3. summarize data sets in realtion	to understand how	
	relation to context.		value means	to context.	negatives and positives	text book (one that follows common core standards)
	4. Inequalities based on		3. Stating rules	4. identify dependent and	are opposite.	
	conditions.		for adding rational	independent variables.		
	5. Dependent and		numbers			
	independent variables.		4. using number			
			properties to solve			
4th Quarter			problems.			
			Formative assessment:			
			1. Quizzes on the topics			
			listed above.			
			2. Homework assignments			
			involving topics			
			mentioned above			
			3. Worksheets dealing			
			with aforementioned			
			topics			
			Summative assessment:			
			1. Test on topics above			
			2. Creating word problems			
			that make use of the topics			
			mentioned above.			

Timeline	Themes/Enduring Understandings/Essential Questions for the Unit	Common Core Standards Addressed	Assessments	Standards Based Skills and Concepts Targeted	Strategies/Practices Used to Teach Skills and Concepts	Resources/Texts Used
	Themes:	**Standards:**	**Pre-assessment:**	**Concepts targeted:**	**Strategies:**	**Resources:**
	1. Rewriting word problems		Quiz involving the	1. rewriting word problems	1. PowerPoint presentations	http://aaamath.com/
	in different formats.		following topics:	in different formats.	2. Lecture style class.	http://www.funbrain.com/brain/MathBrain/MathBrain.html
	2. Adding rational numbers		1. Adding/subtracting	2. addign rational numbers.	3. Group work	http://math-play.com/6th-grade-math-games.html
	3. Subtracting rational	7.EE.1	multiplying/dividing	3. subtracting rational numbers.	to practice problems	national library of virtual manipulative
	numbers.	7.EE.2	rational numbers	4. multiplying rational numbers.	4. Visual presentations	Khan Academy Website
	4. Multiplying rational	7.NS.1	2. Identify what absolute	5. dividing rational numbers.	to understand how	
1st Quarter	numbers.	7.NS.2	value means	6. create, solve, analyze, graph	negatives and positives	text book (one that follows common core standards)
	5. Dividing rational	7.EE.4	3. Stating rules	inequalities and equations.	are opposite.	
	numbers.	7.RP.1	for adding rational	7. solve for unit rate.		
	6. Creating, solving,		numbers			
	graphing, and analyzing		4. using number			
	inequalities and equations.		properties to solve			
	7. Unit rate.		problems.			
			Formative assessment:			
			1. Quizzes on the topics			
			listed above.			
			2. Homework assignments			
			involving topics			
			mentioned above			
			3. Worksheets dealing			
			with aforementioned			
			topics			
			Summative assessment:			
			1. Test on topics above			
			2. Creating word problems			
			that make use of the topics			
			mentioned above.			
	Themes:	**Standards:**	**Pre-assessment:**	**Concepts targeted:**	**Strategies:**	**Resources:**
	1. Proportional		Quiz involving the	1. proportional relationships.	1. PowerPoint presentations	http://aaamath.com/
	relationships.		following topics:	2. represent proportions using	2. Lecture style class.	http://www.funbrain.com/brain/MathBrain/MathBrain.html
	2. Proportion representation		1. Adding/subtracting	tables, graphs, diagrams, or	3. Group work	http://math-play.com/6th-grade-math-games.html
	using tables, graphs,		multiplying/dividing	verbal description.	to practice problems	national library of virtual manipulative
	diagrams, or verbal	7.RP.2	rational numbers	3. calculate percent.	4. Visual presentations	Khan Academy Website
	description.	7.RP.3	2. Identify what absolute	4. apply rational numbers to	to understand how	
	3. Percent.	7.NS.3	value means	the real world.	negatives and positives	text book (one that follows common core standards)
	4. Apply rational numbers	7.G.1	3. Stating rules	5. create scale drawings.	are opposite.	
	to real world problems.	7.G.2	for adding rational	6. draw geometric shapes with		
	5. Scale drawings.	7.G.3	numbers	certain conditions.		
2nd Quarter	6. Drawing geometric	7.G.4	4. using number	7. calculate the area and		
	shapes with given	7.G.5	properties to solve	circumference of a circle.		
	conditions.		problems.	8. use angle facts to solve for an		
	7. Area and circumference			unknown angle.		
	of a circle.		**Formative assessment:**			
	8. Solve for unknown angle		1. Quizzes on the topics			
	using known facts about		listed above.			
	angles.		2. Homework assignments			
			involving topics			
			mentioned above			
			3. Worksheets dealing			
			with aforementioned			
			topics			
			Summative assessment:			
			1. Test on topics above			
			2. Creating word problems			
			that make use of the topics			
			mentioned above.			
	Themes:	**Standards:**	**Pre-assessment:**	**Concepts targeted:**	**Strategies:**	**Resources:**
	1. Solve word problems		Quiz involving the	1. solve word problems	1. PowerPoint presentations	http://aaamath.com/
	dealing with 2 and 3-d		following topics:	involving 2 and 3-d figures as	2. Lecture style class.	http://www.funbrain.com/brain/MathBrain/MathBrain.html
	figures as well as		1. Adding/subtracting	well as surface area, volume,	3. Group work	http://math-play.com/6th-grade-math-games.html
	surface area, volume, and		multiplying/dividing	and the area of different	to practice problems	national library of virtual manipulative
	area of different		rational numbers	geometric shapes.	4. Visual presentations	Khan Academy Website
	geometric shapes.	7.G.6	2. Identify what absolute	2. verifying results.	to understand how	
	2. Analyzing answers to	7.EE.3	value means	3. use population samples to	negatives and positives	text book (one that follows common core standards)
3rd Quarter	make sure results are valid.	7.SP.1	3. Stating rules	gain information.	are opposite.	
	3. Use population sample	7.SP.2	for adding rational	4. analyze variation in		
	to gain information.	7.SP.3	numbers	different data sets.		
	4. Analyze variation in		4. using number	5. compare 2 populations and		
	different data sets.		properties to solve	draw inferences.		
	5. Draw comparative		problems.			
	inferences of 2 populations.					
			Formative assessment:			
			1. Quizzes on the topics			
			listed above.			
			2. Homework assignments			
			involving topics			
			mentioned above			
			3. Worksheets dealing			
			with aforementioned			
			topics			
			Summative assessment:			
			1. Test on topics above			
			2. Creating word problems			
			that make use of the topics			
			mentioned above.			
	Themes:	**Standards:**	**Pre-assessment:**	**Concepts targeted:**	**Strategies:**	**Resources:**
	1. Use measures of center		Quiz involving the	1. use measures of center and	1. PowerPoint presentations	http://aaamath.com/
	and variability to draw		following topics:	variability to draw inferences.	2. Lecture style class.	http://www.funbrain.com/brain/MathBrain/MathBrain.html
	comparative inferences.		1. Adding/subtracting	2. understand that probability	3. Group work	http://math-play.com/6th-grade-math-games.html
	2. Understand probability	7.SP.4	multiplying/dividing	of an event lies between 0 and 1	to practice problems	national library of virtual manipulative

	is between 0 and 1.	7.SP.5	rational numbers	3. calculate relative frequency	4. Visual presentations	Khan Academy Website
	3. Relative frequency and	7.Sp.6	2. Identify what absolute	and approximate probability.	to understand how	
	approximating probability.	7.SP.7	value means	4. develop probability models.	negatives and positives	text book (one that follows common core standards)
	4. Developing probability	7.SP.8	3. Stating rules	5. find the probability of	are opposite.	
	models.		for adding rational	compound events.		
	5. Find the probability of		numbers			
	compound events.		4. using number			
			properties to solve			
4th Quarter			problems.			
			Formative assessment:			
			1. Quizzes on the topics			
			listed above.			
			2. Homework assignments			
			involving topics			
			mentioned above			
			3. Worksheets dealing			
			with aforementioned			
			topics			
			Summative assessment:			
			1. Test on topics above			
			2. Creating word problems			
			that make use of the topics			
			mentioned above.			

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	Themes:	**Standards:**	**Pre assessment:**	**Concepts targeted:**	**Strategies:**	**Resources:**
	1. Rational vs.	8.NS.1	Worksheet asking:	1. Compare and	1. Examples from	http://aaamath.com/
	irrational numbers	8.NS.2	1. Identify rational numbers	contrast rational	textbook	http://www.funbrain.com/brain/MathBrain/MathBrain.html
	2. comparing functions	8.F.2	from irrational ones.	and irrational numbers.	2. PowerPoint	http://math-play.com/6th-grade-math-games.html
1st Quarter	3. Graphing	8.F.1	2. Converting a rational number	2. Compare functions.	presentations	national library of virtual manipulative
	functions	8.G.1	into its decimal expansion.	3. Graph functions	3. Helpful videos	Khan Academy Website
	4. Transformations	8.G.2	3. Deciding which irrational number	4. Applying different	from the internet.	
	of graphs	8.G.3	is larger.	types of transformations		text book (one that follows common core standards)
	5. Congruent angles			to graphs.		
			Formative assessment:	5. Identify congruent		
			1. Quizzes	angles.		
			2. Worksheets			
			3. Solving problems			
			from the book.			
			Summative assessment:			
			1. Test on topics in this			
			standard.			
	Themes:	**Standards:**	**Pre assessment:**	**Concepts Targeted**	**Strategies:**	**Resources:**
	1. Exponents		Worksheet asking:	1. Calculate exponents.	1. Examples from	http://aaamath.com/
	2. Square and		1. Identify rational numbers	2. Calculate square and	textbook	http://www.funbrain.com/brain/MathBrain/MathBrain.html
	cube roots		from irrational ones.	cube roots.	2. PowerPoint	http://math-play.com/6th-grade-math-games.html
	3. Use power of 10	8.EE.1	2. Converting a rational number	3. Use power of 10 to	presentations	national library of virtual manipulative
2nd Quarter	to express size	8.EE.2	into its decimal expansion.	express sizes.	3. Helpful videos	Khan Academy Website
	4. Solving problems	8.EE.3	3. Deciding which irrational number	4. Solve problems with	from the internet.	
	that have numbers	8.EE.4	is larger.	numbers in scientific		text book (one that follows common core standards)
	in scientific notation.	8.SP.1		notation.		
	5. Constructing and	8.SP.2	**Formative assessment:**	5. Create and interpret		
	interpreting scatter plo	8.F.3	1. Quizzes	scatter plots.		
	6. Describe	8.F.4	2. Worksheets	6. analyze data.		
	patterns in data	8.F.5	3. Solving problems	7. Use tables, graphs,		
	7. Function		from the book.	diagrams, or verbal		
	representation using			expressions to represent		
	tables, graphs, diagrams,		**Summative assessment:**	functions.		
	or verbal description		1. Test on topics in this	8. Calculating rate of		
	8. Linear and		standard.	change.		
	non-linear functions					
	9. Rate of change.					
	Themes:	**Standards:**	**Pre assessment:**	**Concepts targeted:**	**Strategies:**	**Resources:**
	1. Graph proportions	8.EE.5	Worksheet asking:	1. Graph proportions.	1. Examples from	http://aaamath.com/
	2. Interpret rate to	8.EE.6	1. Identify rational numbers	2. Interperting rate	textbook	http://www.funbrain.com/brain/MathBrain/MathBrain.html
	mean slope	8.EE.7	from irrational ones.	to mean slope	2. PowerPoint	http://math-play.com/6th-grade-math-games.html
3rd Quarter	3. Use similar	8.EE.8	2. Converting a rational number	3. Use triangles to	presentations	national library of virtual manipulative
	triangles to explain	8.G.4	into its decimal expansion.	explain why slope is the	3. Helpful videos	Khan Academy Website
	why the slope is	8.G.5	3. Deciding which irrational number	same on a non-vertical	from the internet.	
	the same on a		is larger.	line.		text book (one that follows common core standards)
	non-vertical line			4. derive y=mx+b		
	in the coordinate plane.		**Formative assessment:**	5. Solve equations that		
	4. Derive y=mx +b		1. Quizzes	contain 1, many, or 0		
	5. solve equations with		2. Worksheets	solutions.		
	1, many or no		3. Solving problems	5. solve equations with		
	solutions.		from the book.	rational number		
	6. solve equations with			coefficients.		
	rational number		**Summative assessment:**	6.Use graphing to solve		
	coefficients.		1. Test on topics in this	systems of equations.		
	7. Solve simultaneous		standard.	7. Find angle sums.		
	equations.					
	8. Solve systems of					
	equations by graphing					
	3. Angle sum (interior and					
	exterior)					
	Themes:	**Standards:**	**Pre assessment:**	**Concepts targeted:**	**Strategies:**	**Resources:**
	1. Use lines on a graph	8.SP.3	Worksheet asking:	1. Use lines on a graph	1. Examples from	http://aaamath.com/
	to show relationship	8.Sp.4	1. Identify rational numbers	to express relationships	textbook	http://www.funbrain.com/brain/MathBrain/MathBrain.html
	between different	8.G.6	from irrational ones.	between different	2. PowerPoint	http://math-play.com/6th-grade-math-games.html
4th Quarter	data sets.	8.G.7	2. Converting a rational number	data sets.	presentations	national library of virtual manipulative
	2. solve for slope	8.G.8	into its decimal expansion.	2. Solve for slope and	3. Helpful videos	Khan Academy Website
	and intercept	8.G.9	3. Deciding which irrational number	intercepts.	from the internet.	
	3. frequencies		is larger.	3. Prove and apply the		text book (one that follows common core standards)
	4. Pythagorean Theorem			pythagorean theorem.		
	(proving and applying)		**Formative assessment:**	4. Calculate the volume		
	5. Volume of cylinders,		1. Quizzes	of cylinders, cones,		
	cones, and spheres		2. Worksheets	and spheres.		
			3. Solving problems			
			from the book.			
			Summative assessment:			
			1. Test on topics in this			
			standard.			