

Huntsville City Schools

2020 - 2021 Pacing Guide

6th Grade Math

Math Practices:

The Standards for Mathematical Practice describe varieties of expertise that mathematics educators at all levels should seek to develop in their students. These practices rest on important “processes and proficiencies” with longstanding importance in mathematics education. The first of these are the NCTM process standards of problem solving, reasoning and proof, communication, representation, and connections. The second are the strands of mathematical proficiency specified in the National Research Council’s report *Adding It Up*: adaptive reasoning, strategic competence, conceptual understanding (comprehension of mathematical concepts, operations and relations), procedural fluency (skill in carrying out procedures flexibly, accurately, efficiently and appropriately), and productive disposition (habitual inclination to see mathematics as sensible, useful, and worthwhile, coupled with a belief in diligence and one’s own efficacy).

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics
5. Use appropriate tools strategically.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning.

Important Notes:

- Alabama Course of Study objectives are given by number
- This curriculum map’s standards are aligned to the **2016** Alabama Course of Study.
- Resources and Instructional Strategies are suggestions for the topic studied; teachers are not required to use all resources listed and can supplement their teaching with additional resources that support the Course of Study Standards.
- The number of days listed are approximate and are padded to allow a little extra time for review and tests
- The problems listed for each section are suggested types of problems. Teachers can still assign even, odd, or selected problems from each type of problem.
- Students will be allowed to use scientific or graphing calculators on midterm & final exams, and most tests (teacher’s discretion).
 - Please reference the [ACAP Math Item Specifications Grade 6](#) for information about which standards will have access to a calculator on the ACAP assessment.

Online Resources:

- Freckle, Math – Freckle math not only offers additional practice for students, but also Inquiry Based Lessons, and Constructed Response passages by Common Core State Standards: Accessible through Clever
- MARS - Mathematics Assessment Resource Service – formative assessments and group activities: <http://map.mathshell.org/lessons.php>
- Geogebra – In addition to offering powerful calculators and graphing tools, Geogebra offers many interactive activities by Common Core State Standard: <https://www.geogebra.org/>
- Khan Academy – Example videos and practice activities that may be of additional help to students: <https://www.khanacademy.org/>
- Shmoop – Teachers and students can use Shmoop to view videos and practice on various math topics searchable by Common Core State Standard: <https://www.shmoop.com/>
- Dan Meyer’s Ted Talk about teaching math: <https://youtu.be/qocAoN4jNwc>
 - Links to Dan Meyer’s 3-act activities, sorted by standard: <https://docs.google.com/spreadsheet/ccc?key=0AjIqyKM9d7ZYdEhtR3BJMmdBWnM2YWxWYVM1UWowTEE#gid=0>
- Granite City Math Vocabulary: <http://www.graniteschools.org/mathvocabulary/>
- Open Curriculum - activities from all over the internet sorted by standard: www.opencurriculum.org
- Illustrative Mathematics: <https://im.kendallhunt.com/>
 - Teachers must use their school email address to create a free account to access the teacher-only resources
- MARS - Mathematics Assessment Resource Service – formative assessments and group activities: <http://map.mathshell.org/lessons.php>
- Desmos – free online calculator – excellent for working with linear equations, scatterplots, and best-fit lines : www.desmos.com
 - Teacher version includes lessons and activities: <https://teacher.desmos.com/>
- Illuminations – lessons developed by NCTM: <http://illuminations.nctm.org/>
- Create a MyMathLab instructors course using the book: It is a good resource for material on all the topics in this course. You can pull problems from it in MyMathLab also.

Instructional Strategies:

ELlevation: **Note:** Be sure to check the “Math Collection” for specific topic resources”

Build Background:

- * Brainstorm Walk
- * I Notice, I Wonder

Clarify Input:

- * “5 and 2”
- * Anchor Charts
- * Essential Questions
- * Guided Notes
- * “Teach! Teach!”
- * TPR

Fortify Output:

- * Find Your Match
- * Clock Buddies
- * Think, Write, Pair Share
- * Which Corner?

Foster Interactions:

- * “Don’t Mention it”
- * Find the Fib

Develop Academic Language:

- * 360 Words
- * Word Walls

Assess Language and Learning:

- * Wordless Books
- * Whiteboard Checkpoints
- * Differentiated Question Prompts

ARI/Instructional Strategies (Alabama Reading Initiative)

ARI represents the Alabama Reading Initiative. Below are ARI/Instructional strategies that can be easily adapted to work well with mathematics. Some of the strategies can be interchangeable between before, during, and after in lesson planning. There are many instructional strategies that can be used in the classroom and you are not limited to these alone. If you have other ARI/Instructional strategies that work well for you and your students, use them to assist with academic growth and development. Have fun experimenting with different strategies to reach all students and address the different learning styles.

Suggested time period	ARI/Instructional Strategy	Explanation/How to use the strategy
Before:	Admit Slip	<p>Purpose: 1) reflect on content of previous lesson or learned concept</p> <p>The admit-slip strategy requires students to write responses to questions you pose at the beginning of class. Admit slips help students reflect on what they have learned and express what or how they are thinking about the information. Admit slips easily incorporate writing into your content area classroom and require students to think critically.</p>
	KWL	<p>Purposes: 1) link prior knowledge to new information 2) generate questions to guide meaningful learning 3) create own meaning and learning from new text</p> <p>Procedure:</p> <ol style="list-style-type: none"> 1. On the whiteboard, on a handout, or on students' individual clean sheets, three columns should be drawn. 2. Label Column 1 K, Column 2 W, Column 3 L. 3. Before reading, viewing or listening, students fill in the Know column with words, terms, or phrases from their background or prior knowledge. If the students are drawing on a topic previously learned, then the K column may be topic related. But if the topic is something brand-new, and they don't know anything much about it, you should use the K column to have them recalling a similar, analogous, or broader idea. 4. Then have students generate questions about what they might learn or want to learn about the topic, which might follow a quick glance at the topic headings, pictures, problems and charts that are found in the text or on a handout provided. This helps set their purpose for the lesson or concept and focuses their attention on key ideas. 5. After the math lesson and reading, students should fill in their new knowledge gained from the content. They can also clear up misperceptions about the topic which might have shown up in the Know column before they learned anything about the topic. This is the stage of metacognition: Does the student fully understand?
	Think Pair Share	<p>Purposes: There are a variety of uses for this activity</p> <ol style="list-style-type: none"> 1) Think. The teacher provokes students' thinking with a problem, question, prompt or observation. The students should take a few moments just to THINK about the question and jot down their thoughts. 2) Pair with someone...Using designated partners, nearby neighbors, or a desk mate, students PAIR up to talk about the answer each came up with. They compare their mental or written notes and identify the answers they think are best, most convincing, or most unique. 3) Share. After students talk in pairs for a few moments, the teacher calls for pairs to SHARE their thinking with the rest of the class. Sharing can be accomplished in a variety of ways: going around in round-robin fashion, calling on each pair, taking answers as they are called out (or as hands are raised), pairing with another pair. Often, the teacher or a designated helper will record these responses on the board or on the overhead.

	Quick Write	<p>Purposes: 1) introduce a concept and connect this concept with prior knowledge or experiences and 2) allow students to discuss and learn from each other</p> <p>Procedure:</p> <ol style="list-style-type: none"> 1. Introduce a single word, phrase, problem, or question to the class. 2. Students copy the concept on index cards or sheet of paper. 3. Students are given two to five minutes to write whatever comes to their minds relative to the concept. They may write freely using single words, phrases, sentences, etc. 4. After time is called, students may volunteer to share their thoughts on the subject.
	Turn and Talk/ Table Talk	<p>Purposes: 1) activate prior knowledge, 2) build background knowledge, 3) encourage active listening, and 4) set a purpose for concept/lesson or reading</p> <p>Procedure:</p> <ol style="list-style-type: none"> 1. Write a thought-provoking statement or question related to the subject of the upcoming lesson on the whiteboard or project overhead. 2. Each student has two minutes to read the question or statement, reflect, and write a response. 3. Each student has three minutes to share his/her response with a partner, reflect, and write a response to his/her partner's statement. 4. Pairs combine to form small groups of 4-6 students. Responses are shared within the group and one response is chosen to share with the whole class.
	Bell Ringer/Bell Work/Warm Up	<p>Bell ringers are questions or tasks posted before students enter the classroom. They are to be completed before class starts, or, as the name suggests, as the bell rings. Bell ringers provide benefits to both the student and the teacher in all classroom settings ranging from elementary to high school. Bell ringers help to encourage promptness, organization, responsibility, spark prior knowledge, reinforce concepts, promote student engagement and so much more.</p>
During:	Think Pair Share	<p>Purposes: There are a variety of uses for this activity 1) Think. The teacher provokes students' thinking with a problem, question, prompt, or observation. The students should take a few moments just to THINK about the question and jot down their thoughts. 2) Pair with someone...Using designated partners, nearby neighbors, or a desk mate, students PAIR up to talk about the answer each came up with. They compare their mental or written notes and identify the answers they think are best, most convincing, or most unique. 3) Share. After students talk in pairs for a few moments, the teacher calls for pairs to SHARE their thinking with the rest of the class. Sharing can be accomplished in a variety of ways: going around in round-robin fashion, calling on each pair, taking answers as they are called out (or as hands are raised), pairing with another pair. Often, the teacher or a designated helper will record these responses on the board or on the overhead.</p>

	Turn and Talk/ Table Talk	<p>Purposes: 1) activate prior knowledge, 2) build background knowledge, 3) encourage active listening, and 4) set a purpose for concept/lesson or reading</p> <p>Procedure:</p> <ol style="list-style-type: none"> 1. Write a thought-provoking statement or question related to the subject of the upcoming lesson on the chalkboard. 2. Each student has two minutes to read the topic, reflect, and write a response. 3. Each student has three minutes to share his/her response with a partner, reflect, and write a response to his/her partner's statement. 4. Pairs combine to form small groups of 4-6 students. Responses are shared within the group and one response is chosen to share with the whole class.
	Jot Notes	<p>Jot Notes are basically lesson notes the students jot down before, during and after the lesson (in some cases) ...The notes can be given in a variety of formats or structures...Example: chart format, graphic organizer, table format, guided notes, foldables, etc....</p>
	Quadrant Cards / Frayer Model	<p>Purposes: 1) motivate students to engage in vocabulary study and expand vocabulary 2) Reinforce concepts etc.....</p> <p>Procedure:</p> <p>Divide a sheet of paper into four parts Adapt to meet your students' needs.... whether you want to emphasize on vocabulary, connecting concepts, or organizing steps or procedures for graphing or solving etc....</p>
	Venn Diagram	<p>Purpose: compare concepts</p> <p>Procedure:</p> <ol style="list-style-type: none"> 1. Draw two circles overlapping. Each circle represents a concept. 2. Unique characteristics of the two ideas being compared are recorded in the outer of the two overlapping circles. Common characteristics are recorded where the circles overlap. 3. Teacher should model the strategy first.

	Charts/Foldables	<p>Purposes: 1) engage with concept/lesson/text 2) construct graphic organizer/chart/foldable 3) self-monitor comprehension</p> <p>Procedure:</p> <ol style="list-style-type: none"> 1. Create a Jot Chart, project on the whiteboard or produce a print copy for each student. The chart/matrix should be structured as follows. You can also use foldables to accomplish these tasks. <ul style="list-style-type: none"> o Main ideas/items for description or analysis are listed across the top of the chart. o Question/characteristics of the main concepts are listed down the left side of the chart. 2. Discuss the purpose of the chart with students before the assignment. Give an example of a completed chart to help clarify its functions. 3. Have students complete the chart or foldable as you go through the lesson or assign tasks to groups etc...As the teacher, you decide and adapt this to meet the needs of your students and what you want to accomplish from the task. 4. Discuss the students' findings and compile the results into a group chart. Stress the relationships between the data in the chart.
	Partner Learning	<p>Purpose: 1) To engage students in the content and spark meaningful discussions 2) To encourage collaboration and improve knowledge among students 3) Promote socialization and boost self-esteem 4) Reinforce concepts taught through open questioning and answer sessions</p> <p>Procedure: The students are paired up and given a task to complete together; open discussions, sharing of ideas, writing, final product presentation, etc....</p>
	Concept Map	<p>Purpose: activate and organize knowledge about a specific topic</p> <p>Procedure:</p> <ol style="list-style-type: none"> 1. Select the main idea or topic of discussion; write it on a chart, overhead, or whiteboard; and put a circle around it. 2. Have students brainstorm subtopics; knowledge related to the topic. Use lines to connect to the main topic. 3. Have students brainstorm specific vocabulary, ideas, mathematical knowledge related to each subtopic. Record these ideas beneath each subtopic. Add new knowledge to the concept map as learning progresses.
	Graphic Organizer	<p>Purposes: 1) provide a visual model of the structure of lesson and 2) provide a format for organizing information and concepts</p> <p>Procedure:</p> <ol style="list-style-type: none"> 1. Introduce the graphic organizer to the students. Demonstrate how it works by noting key concepts and ideas on the organizer. 2. Have groups of students practice using the graphic organizer with ideas from independently read mathematical text and/or mathematical information presented during lessons. Students can share their ideas with the class. 3. Choose an organizer that matches what you want to accomplish with your students for the topic or lesson.

	Jigsaw	<p>Purposes: 1) engage with mathematical concept or text 2) self-monitor comprehension 3) integrate new information with prior knowledge 4) respond to mathematical concept or text through discussion</p> <p>Procedure:</p> <ol style="list-style-type: none"> 1. Divide class into 4-6 member groups; each member becomes an expert on a different topic/concept assigned by teacher. 2. Members of the teams with the same topic meet in an expert group with a variety of resource materials and texts available to explore their topic. 3. The students prepare how they will teach the information to others. 4. Everyone returns to their jigsaw (home) teams to teach what they learned to the other members. It may be helpful to supply each student with a graphic organizer for note taking purposes. 5. Team members listen and take notes as their classmate teaches them
After:	Cooperative Learning/ Partner Learning/Practice	<p>Cooperative learning is the process of breaking a classroom of students into small groups so they can discover a new concept together and help each other learn. Each group is given a task or assignment to complete. Often a record keeper and team leader are assigned to keep everyone on task. Collaboration and discussion are expected with a final assignment or project completed and submitted. Open discussions between the teacher and/or students can occur during class as well.</p>
	Stations/ Carousels etc....	<p>Purposes: This strategy can fit almost any purpose developed.</p> <p>Procedure:</p> <ol style="list-style-type: none"> 1. Teacher determines what topics/lessons will be placed on chart paper. 2. Chart paper is placed on walls around the room. 3. Teacher places students into groups of three- four. 4. Students begin at a designated chart. 5. They read the question or phrase, discuss with group, and respond directly on the chart or assigned task sheet. 6. After an allotted amount of time, students rotate to next chart. 7. Students read next question and records new response or discussion points. 8. Continue until each group has responded to each prompt. 9. Teacher shares information from charts and conversations heard while responding. <p>** This strategy can be modified by having the chart “carousel” to groups, rather than groups moving to chart.</p>

	Exit slip	<p>Purpose: 1) reflect on content of lesson</p> <p>The exit-slip strategy requires students to write responses to questions you pose at the end of class. Exit slips help students reflect on what they have learned and express what or how they are thinking about the new information. Exit slips easily incorporate writing into your content area classroom and require students to think critically.</p> <p>There are three categories of exit slips (Fisher & Frey, 2004):</p> <ul style="list-style-type: none"> • Prompts that document learning, <ul style="list-style-type: none"> o Ex. Write one thing you learned today. o Ex. Discuss how today's lesson could be used in the real world. • Prompts that emphasize the process of learning, <ul style="list-style-type: none"> o Ex. I didn't understand... o Ex. Write one question you have about today's lesson. • Prompts to evaluate the effectiveness of instruction <ul style="list-style-type: none"> o Ex. Did you enjoy working in small groups today?
	Turn and Talk/Table Talk	<p>Purposes: 1) activate prior knowledge, 2) build background knowledge, 3) encourage active listening, and 4) set a purpose for concept/lesson or reading</p> <p>Procedure:</p> <ol style="list-style-type: none"> 1. Write a thought-provoking statement or question related to the subject of the upcoming lesson on the whiteboard or project overhead. 2. Each student has two minutes to read the question or statement, reflect, and write a response. 3. Each student has three minutes to share his/her response with a partner, reflect, and write a response to his/her partner's statement. 4. Pairs combine to form small groups of 4-6 students. Responses are shared within the group and one response is chosen to share with the whole class.

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	Hands on Activity/ Graphs, charts, diagrams, etc.	Hand on activities are simply activities which students physically in some way connect with their learning...writing, drawing, graphing, demonstration through movement, use of manipulatives etc.... Hands-on activities are especially important in the classroom because it allows students to engage in kinesthetic learning. Educational studies have shown that kinesthetic learning, where a student performs some type of physical activity rather than just listening to a lecture, is the most popular type of learning with students - doing or working on something before, during, and/or after the lesson, helps them to gain a better understanding of the material. It allows students to experiment with trial and error, learn from their mistakes, and understand the potential gaps between theory and practice. It also encourages students to collaborate with their peers and share information from different perspectives.
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Formatting:

- Honors or advanced material is highlighted in blue. Example: **Advanced: Page 145 #75-86**
- Remediation is highlighted in yellow. Example: **Remediation: Small group on fractions**

The Textbook for this course is:

enVisionmath2.0 Grade 6

Huntsville City Schools 2020 - 2021 Pacing Guide 6th Grade Math

First Semester

1st 9 – weeks (August 17 – October 23)

44 instructional days; 22 A-Days and 22 B-Days

Time Period	Unit Topic	Standards	Resources
Week 1	<p style="text-align: center;">Multiplication Review</p> <p style="text-align: center;">Fractions Review</p> <p style="text-align: center;">Place Value Review</p>	<p>During the initial week of school, it's important for teachers to set procedures for their classroom as well as access student's prior knowledge. Use this week to access/review skills or others identified as a need.</p>	<p>Freckle</p> <p>XtraMath</p> <p>https://www.softschools.com/math/practice/place_value.jsp</p>

<p>Week 2</p>	<p>Domain: The Number System Operations with Decimals/Divide Whole Numbers</p>	<p>5. Fluently divide multi-digit numbers using the standard algorithm. 6.NS.2 6. Fluently add, subtract, multiply, and divide multi-digit decimals using the standard algorithm for each operation. 6.NS.3</p>	<p>EnVision: Topic 1- Use Positive Rational Numbers</p> <ul style="list-style-type: none"> • Fluently Add, Subtract, and Multiply Decimals (1-1) • Fluently Divide Whole Numbers and Decimals (1-2) <p>MARS:</p> <ul style="list-style-type: none"> • Interpreting Multiplication and Division <p>EnVision: Math Diagnosis and Intervention System 2.0-Booklet L</p> <p>EnVision: Intervention Clusters 1-8</p> <p>Freckle: Number System</p> <p>Envision: Enrichment (from each lesson)</p> <p>Khan Academy-Unit: Arithmetic Operations https://www.khanacademy.org/math/cc-sixth-grade-math/cc-6th-arithmetic-operations</p> <p>Engage New York Module 2 https://bit.ly/2LySUT3</p>
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<p>Week 3 & Week 4</p>	<p>Multiply Fractions, Divide Fractions and Mixed Numbers</p>	<p>4. Interpret and compute quotients of fractions, and solve word problems involving division of fractions, e.g., by using visual fraction models and equations to represent the problem. 6.NS.1</p>	<p>Note: There should be a mid-point check between lessons Multiply Fractions (1-3) and Understand Division with Fractions (1-4)</p> <p>EnVision: Topic 1- Use Positive Rational Numbers</p> <ul style="list-style-type: none"> • Multiply Fractions (1-3) • Understand Division with Fractions (1-4) • Divide Fractions by Fractions (1-5) • Divide Mixed Numbers (1-6) <p>EnVision: Math Diagnosis and Intervention System 2.0-Booklet L</p> <p>EnVision: Intervention Clusters 9-12</p> <p>Freckle: Number System</p> <p>EnVision: Enrichment (from each lesson)</p> <p>Khan Academy-Unit: Arithmetic Operations https://www.khanacademy.org/math/cc-sixth-grade-math/cc-6th-arithmetic-operations</p> <p>Engage New York Module 2 https://bit.ly/31Fou6R</p>
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<p>Week 5</p>	<p>Multistep Problems with Fractions and Decimals</p>	<p>4. Interpret and compute quotients of fractions, and solve word problems involving division of fractions, e.g., by using visual fraction models and equations to represent the problem. 6.NS.1</p>	<p>EnVision: Topic 1- Use Positive Rational Numbers</p> <ul style="list-style-type: none"> • Solve Problems with Rational Numbers (1-7) <p>EnVision: Math Diagnosis and Intervention System 2.0-Booklet L</p> <p>EnVision: Intervention Cluster 22</p> <p>Freckle: Number System</p> <p>EnVision: Enrichment (from each lesson)</p> <p>Khan Academy https://www.khanacademy.org/math/algebra/x2f8bb11595b61c86:irrational-numbers/x2f8bb11595b61c86:irrational-numbers-intro/v/introduction-to-rational-and-irrational-numbers</p> <p>https://www.engageny.org Module 2</p>
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<p>Week 6</p>	<p>Domain: The Number System Integers, Absolute Value, and Rational Numbers</p>	<p>8. Understand that positive and negative numbers are used together to describe quantities having opposite directions or values (e.g., temperature above/below zero, elevation above/below sea level, credits/debits, positive/negative electric charge); use positive and negative numbers to represent quantities in real-world contexts explaining the meaning of 0 in each situation. 6.NS.5</p> <p>9. Understand a rational number as a point on the number line. Extend number line diagrams and coordinate axes familiar from previous grades to represent points on the line and in the plane with negative number coordinates. 6.NS.6</p> <p>a. Recognize opposite signs of numbers as indicating locations on opposite sides of 0 on the number line; recognize that the opposite of the opposite of a number is the number itself, e.g., $-(-3) = 3$, and that 0 is its own opposite. 6.NS.6a</p> <p>c. Find and position integers and other rational numbers on a horizontal or vertical number line diagram; find and position pairs of integers and other rational numbers on a coordinate plane. 6.NS.6c</p> <p>10. Understand ordering and absolute value of rational numbers. 6.NS.7</p> <p>a. Interpret statements of inequality as statements about the relative position of two numbers on a number line diagram. 6.NS.7a</p> <p>b. Write, interpret, and explain statements of order for rational numbers in real-world contexts. 6.NS.7b</p> <p>c. Understand the absolute value of a rational number as its distance from 0 on the number line; interpret absolute value as magnitude for a positive or negative quantity in a real-world situation. 6.NS.7c</p> <p>d. Distinguish comparisons of absolute value from statements about order. 6.NS.7d</p>	<p>EnVision: Topic 2- Integers and Rational Numbers</p> <ul style="list-style-type: none"> • Understanding Integers (2-1) • Represent Rational Numbers on the Number Line (2-2) • Absolute Values of Rational Numbers (2-3) <p>EnVision: Math Diagnosis and Intervention System 2.0 - Booklet L</p> <p>EnVision: Intervention Clusters 21 & 22</p> <p>Freckle: Number System</p> <p>EnVision: Enrichment (from each lesson)</p> <p>Khan Academy- Unit: Negative Numbers and Coordinate Plane https://www.khanacademy.org/math/pre-algebra/pre-algebra-negative-numbers</p> <p>Engage New York: Module 3 https://bit.ly/2YaAgUk</p>
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<p>Week 7 & Week 8</p>	<p>Coordinate Planes</p>	<p>b. Understand signs of numbers in ordered pairs as indicating locations in quadrants of the coordinate plane; recognize that when two ordered pairs differ only by signs, the locations of the points are related by reflections across one or both axes. 6.NS.6b</p> <p>c. Find and position integers and other rational numbers on a horizontal or vertical number line diagram; find and position pairs of integers and other rational numbers on a coordinate plane. 6.NS.6c</p> <p>11. Solve real-world and mathematical problems by graphing points in all four quadrants of the coordinate plane. Include use of coordinates and absolute value to find distances between points with the same first coordinate or the same second coordinate. 6.NS.8</p> <p>23. Draw polygons in the coordinate plane given coordinates for the vertices; use coordinates to find the length of a side joining points with the same first coordinate or the same second coordinate. Apply these techniques in the context of solving real-world and mathematical problems. 6.G.3</p>	<p>Note: There should be a mid-point check between lessons Absolute Values of Rational Numbers (2-3) and Represent Rational Numbers on the Coordinate Plane (2-4)</p> <p>EnVision: Topic 2- Integers and Rational Numbers</p> <ul style="list-style-type: none"> • Represent Rational Numbers on the Coordinate Plane (2-4) • Find Distances on the Coordinate Plane (2-5) • Represent Polygons on the coordinate Plane (2-6) <p>EnVision: Math Diagnosis and Intervention System 2.0-Booklet N</p> <p>EnVision: Intervention Clusters 21 & 22</p> <p>Freckle: Number System</p> <p>Envision: Enrichment (from each lesson)</p> <p>Khan Academy- Unit: Negative Numbers and Coordinate Plane https://www.khanacademy.org/math/pre-algebra/pre-algebra-negative-numbers</p> <p>Engage New York: Module 3 https://bit.ly/2YaAgUK</p>
<p>Week 9</p>	<p>Review</p>	<p>The Number System standards</p>	<p>Freckle: Number System</p> <p>Khan Academy</p> <p>Envision Fluency Practice: Topics 1 & 2</p>

2nd 9 – weeks (October 26 – December 22)
38 instructional days; 19 A-Days and 19 B-Days

Time Period	Unit Topic	Standards	Resources
Week 1	<p style="text-align: center;">Domain: Expressions and Equations & The Number System Exponents, GCF, LCM, & Expressions</p>	<p>12. Write and evaluate numerical expressions involving whole-number exponents. 6.EE.1 14. Apply the properties of operations to generate equivalent expressions. 6.EE.3 7. Find the greatest common factor of two whole numbers less than or equal to 100 and the least common multiple of two whole numbers less than or equal to 12. Use the distributive property to express a sum of two whole numbers 1-100 with a common factor as a multiple of a sum of two whole numbers with no common factor. 6.NS.4</p>	<p>EnVision Topic 3- Numeric and Algebraic Expressions</p> <ul style="list-style-type: none"> • Understand and Represent Exponents (3-1) • Find Greatest Common Factor and Least Common Multiple (3-2) • Write and Evaluate Numerical Expressions (3-3) <p>MARS:</p> <ul style="list-style-type: none"> • Finding Factors and Multiples <p>EnVision: Math Diagnosis and Intervention System 2.0 - Booklet K</p> <p>EnVision: Intervention Clusters 18 & 23</p> <p>Freckle: Expressions & Equations</p> <p>EnVision: Enrichment From each lesson)</p> <p>Khan Academy- Unit: Variables and Expressions https://www.khanacademy.org/math/cc-sixth-grade-math/cc-6th-expressions-and-variables</p> <p>Unit: Properties of Numbers https://www.khanacademy.org/math/cc-sixth-grade-math/cc-6th-factors-and-multiples</p> <p>https://www.engageny.org/ Module 4</p>

<p>Week 2</p>	<p>Expressions</p>	<p>a. Write expressions that record operations with numbers and with letters standing for numbers. 6.EE.2a</p> <p>b. Identify parts of an expression using mathematical terms (sum, term, product, factor, quotient, coefficient); view one or more parts of an expression as a single entity. 6.EE.2b</p> <p>c. Evaluate expressions at specific values of their variables. Include expressions that arise from formulas used in real-world problems. Perform arithmetic operations, including those involving whole-number exponents, in the conventional order when there are no parentheses to specify a particular order (Order of Operations). 6.EE.2c</p> <p>17. Use variables to represent numbers and write expressions when solving a real-world or mathematical problem; understand that a variable can represent an unknown number or, depending on the purpose at hand, any number in a specified set. 6.EE.6</p>	<p>Note: There should be a mid-point check between lessons Write Algebraic Expressions (3-4) and Evaluate Algebraic Expressions (3-5)</p> <ul style="list-style-type: none"> • Write Algebraic Expressions (3-4) • Evaluate Algebraic Expressions (3-5) <p>EnVision: Math Diagnosis and Intervention System 2.0 - Booklet K</p> <p>EnVision: Intervention Clusters 23 & 24</p> <p>Freckle: Expressions & Equations</p> <p>Envision: Enrichment (from each lesson)</p> <p>Khan Academy- Unit: Variables and Expressions https://www.khanacademy.org/math/cc-sixth-grade-math/cc-6th-expressions-and-variables</p> <p>https://www.engageny.org/ Module 4</p>
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<p>Week 3</p>	<p>Expressions</p>	<p>14. Apply the properties of operations to generate equivalent expressions. 6.EE.3 15. Identify when two expressions are equivalent (i.e., when the two expressions name the same number regardless of which value is substituted into them). 6.EE.4</p>	<ul style="list-style-type: none">• Generate Equivalent Expressions (3-6)• Simplify Algebraic Expressions (3-7) <p>EnVision: Math Diagnosis and Intervention System 2.0 - Booklet K</p> <p>EnVision: Intervention Clusters 23 & 24</p> <p>Freckle: Expressions & Equations</p> <p>Envision: Enrichment (from each lesson)</p> <p>Khan Academy- Unit: Variables and Expressions https://www.khanacademy.org/math/cc-sixth-grade-math/cc-6th-expressions-and-variables</p> <p>https://www.engageny.org/ Module 4</p>
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<p>Week 4</p> <p>Note: Days in this block are set aside for review and testing of Topic 4</p>	<p>Equations</p>	<p>15. Identify when two expressions are equivalent (i.e., when the two expressions name the same number regardless of which value is substituted into them). 6.EE.4</p> <p>16. Understand solving an equation or inequality as a process of answering a question: which values from a specified set, if any, make the equation or inequality true? Use substitution to determine whether a given number in a specified set makes an equation or inequality true. 6.EE.5</p> <p>18. Solve real-world and mathematical problems by writing and solving equations of the form $x + p = q$ and $px = q$ for cases in which p, q, and x are all nonnegative rational numbers. 6.EE.7</p>	<p>EnVision Topic 4- Represent and Solve Equations and Inequalities</p> <ul style="list-style-type: none"> Understand Equations and Solutions (4-1) Apply Properties of Equality (4-2) <p>MARS:</p> <ul style="list-style-type: none"> Interpreting Equations <p>EnVision: Math Diagnosis and Intervention System 2.0 - Booklet K</p> <p>EnVision: Intervention Cluster 25</p> <p>Freckle: Expressions & Equations</p> <p>Envision: Enrichment (from each lesson)</p> <p>Khan Academy- Unit: Equations and Inequalities Introduction https://www.khanacademy.org/math/cc-sixth-grade-math/cc-6th-equations-and-inequalities</p> <p>https://www.engageny.org/ Module 4</p>
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<p>Week 5</p>	<p>Equations</p>	<p>17. Use variables to represent numbers, and write expressions when solving a real-world or mathematical problem; understand that a variable can represent an unknown number or, depending on the purpose at hand, any number in a specified set. 6.EE.6</p> <p>18. Solve real-world and mathematical problems by writing and solving equations of the form $x + p = q$ and $px = q$ for cases in which p, q, and x are all nonnegative rational numbers. 6.EE.7</p>	<ul style="list-style-type: none"> • Write and Solve addition and Subtraction Equations (4-3) • Write and Solve Multiplication and Division Equations (4-4) <p>EnVision: Math Diagnosis and Intervention System 2.0 - Booklet K</p> <p>EnVision: Intervention Cluster 25</p> <p>Freckle: Expressions & Equations</p> <p>Envision: Enrichment (from each lesson)</p> <p>Khan Academy- Unit: Equations and Inequalities Introduction https://www.khanacademy.org/math/cc-sixth-grade-math/cc-6th-equations-and-inequalities</p> <p>https://www.engageny.org/ Module 4</p>
<p>Week 6</p>	<p>Equations</p>	<p>17. Use variables to represent numbers, and write expressions when solving a real-world or mathematical problem; understand that a variable can represent an unknown number or, depending on the purpose at hand, any number in a specified set. 6.EE.6</p> <p>18. Solve real-world and mathematical problems by writing and solving equations of the form $x + p = q$ and $px = q$ for cases in which p, q, and x are all nonnegative rational numbers. 6.EE.7</p>	<ul style="list-style-type: none"> • Write and Solve Equations with Rational Numbers (4-5) <p>EnVision: Math Diagnosis and Intervention System 2.0 - Booklet K</p> <p>EnVision: Intervention Cluster 25</p> <p>Freckle: Expressions & Equations</p> <p>Envision: Enrichment (from each lesson)</p> <p>Khan Academy- Unit: Equations and Inequalities Introduction https://www.khanacademy.org/math/cc-sixth-grade-math/cc-6th-equations-and-inequalities</p> <p>https://www.engageny.org/ Module 4</p>

<p>Week 7</p>	<p>Inequalities</p>	<p>16. Understand solving an equation or inequality as a process of answering a question: which values from a specified set, if any, make the equation or inequality true? Use substitution to determine whether a given number in a specified set makes an equation or inequality true. 6.EE.5 19. Write an inequality of the form $x > c$ or $x < c$ to represent a constraint or condition in a real-world or mathematical problem. Recognize that inequalities of the form $x > c$ or $x < c$ have infinitely many solutions; represent solutions of such inequalities on number line diagrams. 6.EE.8</p>	<p>Note: There should be a mid-point check between lessons Write and Solve Equations with Rational Numbers (4-5) and Understand and Write Inequalities (4-6)</p> <ul style="list-style-type: none"> • Understand and Write Inequalities (4-6) • Solve Inequalities (4-7) <p>EnVision: Math Diagnosis and Intervention System 2.0 - Booklet K</p> <p>Freckle: Expressions & Equations</p> <p>Envision: Enrichment (from each lesson)</p> <p>Khan Academy- Unit: Equations and Inequalities Introduction https://www.khanacademy.org/math/cc-sixth-grade-math/cc-6th-equations-and-inequalities</p> <p>https://www.engageny.org/ Module 4</p>
<p>Week 8</p>	<p>Inequalities</p>	<p>20. Use variables to represent two quantities in a real-world problem that change in relationship to one another; write an equation to express one quantity, thought of as the dependent variable, in terms of the other quantity, thought of as the independent variable. Analyze the relationship between the dependent and independent variables using graphs and tables, and relate these to the equation. 6.EE.9</p>	<ul style="list-style-type: none"> • Understand Dependent and Independent Variables (4-8) • Use Patterns to Write and Solve Equations (4-9) • Relate Tables, Graphs and Equations (4-10) <p>EnVision: Math Diagnosis and Intervention System 2.0 - Booklet K</p> <p>Freckle: Expressions & Equations</p> <p>Envision: Enrichment (from each lesson)</p> <p>Khan Academy- Unit: Equations and Inequalities Introduction https://www.khanacademy.org/math/cc-sixth-grade-math/cc-6th-equations-and-inequalities</p> <p>https://www.engageny.org/ Module 4</p>

Second Semester
 3rd 9 – weeks (January 4 – March 12)
 48 instructional days; 24 A-Days and 24 B-Days

Time Period	Unit Topic	Standards	Resources
<p>Week 1</p> <p>Note: Days in this block are set aside for review and testing of Topic 5</p>	<p style="text-align: center;">Domain: Ratios and Proportional Relationships Ratios</p>	<p>1. Understand the concept of a ratio, and use ratio language to describe a ratio relationship between two quantities. 6.RP.1</p> <p>3. Use ratio and rate reasoning to solve real-world and mathematical problems, e.g., by reasoning about tables of equivalent ratios, tape diagrams, double number line diagrams, or equations. 6.RP.3</p> <p>a. Make tables of equivalent ratios relating quantities with whole-number measurements, find missing values in the tables, and plot the pairs of values on the coordinate plane. Use tables to compare ratios. 6.RP.3a</p>	<p>EnVision Topic 5-Understand and Use Ratio and Rate</p> <ul style="list-style-type: none"> • Understand Ratios (5-1) • Generate Equivalent Ratios (5-2) <p>MARS:</p> <ul style="list-style-type: none"> • Sharing Costs Equitably: Traveling to School <p>EnVision: Math Diagnosis and Intervention System 2.0 - Booklet M</p> <p>EnVision: Intervention Cluster 13</p> <p>Freckle: Ratios & Proportions</p> <p>Envision: Enrichment (from each lesson)</p> <p>Khan Academy- Unit: Ratios, Rates, Proportions https://www.khanacademy.org/math/pre-algebra/pre-algebra-ratios-rates</p> <p>https://www.engageny.org/ Module 1</p>

<p>Week 2</p> <p>Note: Days in this block are set aside for review and testing of Topic 6</p>	<p>Ratios</p>	<p>a. Make tables of equivalent ratios relating quantities with whole-number measurements, find missing values in the tables, and plot the pairs of values on the coordinate plane. Use tables to compare ratios. 6.RP.3a</p>	<ul style="list-style-type: none"> • Compare Ratios (5-3) • Represent and Graph Ratios (5-4) <p>Note: There should be a mid-point check between lessons Represent and Graph Ratios (5-4) and Understand Rates and Unit Rates (5-5)</p> <p>EnVision: Math Diagnosis and Intervention System 2.0 - Booklet M</p> <p>EnVision: Intervention Cluster 13</p> <p>Freckle: Ratios & Proportions</p> <p>Envision: Enrichment (from each lesson)</p> <p>Khan Academy- Unit: Ratios, Rates, Proportions https://www.khanacademy.org/math/pre-algebra/pre-algebra-ratios-rates</p> <p>https://www.engageny.org/ Module 1</p>
<p>Week 3</p>	<p>Rates</p>	<p>2. Understand the concept of a unit rate a b associated with a ratio $a:b$ with $b \neq 0$, and use rate language in the context of a ratio relationship. 6.RP.2</p> <p>a. Make tables of equivalent ratios relating quantities with whole-number measurements, find missing values in the tables, and plot the pairs of values on the coordinate plane. Use tables to compare ratios. 6.RP.3a</p> <p>b. Solve unit rate problems including those involving unit pricing and constant speed. 6.RP.3b</p>	<ul style="list-style-type: none"> • Understand Rates and Unit Rates (5-5) • Compare Unit Rates (5-6) <p>EnVision: Math Diagnosis and Intervention System 2.0 - Booklet M</p> <p>EnVision: Intervention Cluster 14</p> <p>Freckle: Ratios & Proportions</p> <p>Envision: Enrichment (from each lesson)</p> <p>Khan Academy- Unit: Ratios, Rates, Proportions https://www.khanacademy.org/math/pre-algebra/pre-algebra-ratios-rates</p> <p>https://www.engageny.org/ Module 1</p>

<p>Week 4</p>	<p>Rates</p>	<p>b. Solve unit rate problems including those involving unit pricing and constant speed. 6.RP.3b</p>	<ul style="list-style-type: none"> Solve Unit Rate Problems (5-7) <p>EnVision: Math Diagnosis and Intervention System 2.0 - Booklet M</p> <p>EnVision: Intervention Cluster 14</p> <p>Freckle: Ratios & Proportions</p> <p>Envision: Enrichment (from each lesson)</p> <p>Khan Academy- Unit: Ratios, Rates, Proportions https://www.khanacademy.org/math/pre-algebra/pre-algebra-ratios-rates</p> <p>https://www.engageny.org/ Module 1</p>
<p>Week 5</p>	<p>Rates</p>	<p>d. Use ratio reasoning to convert measurement units; manipulate and transform units appropriately when multiplying or dividing quantities. 6.NS.3d</p>	<ul style="list-style-type: none"> Ratio Reasoning: Convert Customary Units (5-8) Ratio Reasoning: Convert Metric Units (5-9) <p>EnVision: Math Diagnosis and Intervention System 2.0 - Booklet M</p> <p>EnVision: Intervention Cluster 14</p> <p>Freckle: Ratios & Proportions</p> <p>Envision: Enrichment (from each lesson)</p> <p>Khan Academy- Unit: Ratios, Rates, Proportions https://www.khanacademy.org/math/pre-algebra/pre-algebra-ratios-rates</p> <p>https://www.engageny.org/ Module 1</p>

<p>Week 6</p>	<p>Rates</p>	<p>d. Use ratio reasoning to convert measurement units; manipulate and transform units appropriately when multiplying or dividing quantities. 6.NS.3d</p>	<ul style="list-style-type: none"> • Relate Customary and Metric Units (5-10) <p>EnVision: Math Diagnosis and Intervention System 2.0 - Booklet M</p> <p>EnVision: Intervention Cluster 14</p> <p>Freckle: Ratios & Proportions</p> <p>Envision: Enrichment (from each lesson)</p> <p>Khan Academy</p> <p>https://www.engageny.org/ Module 1</p>
<p>Week 7</p>	<p>Percent</p>	<p>c. Find a percent of a quantity as a rate per 100 (e.g., 30% of a quantity means 30 100 times the quantity); solve problems involving finding the whole, given a part and the percent. 6.RP.3c</p>	<ul style="list-style-type: none"> • Understand Percent (6-1) • Relate Fractions, Decimals, and Percent (6-2) • Represent Percent Greater Than 100 or Less Than 1 (6-3) <p>MARS:</p> <ul style="list-style-type: none"> • Translating between Fractions, Decimals and Percent <p>EnVision: Math Diagnosis and Intervention System 2.0 - Booklet M</p> <p>EnVision: Intervention Clusters 16 & 17</p> <p>Freckle: Ratios & Proportions</p> <p>Envision: Enrichment (from each lesson)</p> <p>Khan Academy- Unit: Ratios, Rates, Proportions</p> <p>https://www.khanacademy.org/math/pre-algebra/pre-algebra-ratios-rates</p> <p>https://www.engageny.org/ Module 1</p>

<p>Week 8</p>	<p>Percent</p>	<p>c. Find a percent of a quantity as a rate per 100 (e.g., 30% of a quantity means 30 100 times the quantity); solve problems involving finding the whole, given a part and the percent. 6.RP.3c</p>	<ul style="list-style-type: none"> • Estimate to Find Percent (6-4) • Find Percent of a Number (6-5) • Find the Whole Given a Part and the Percent (6-6) <p>EnVision: Math Diagnosis and Intervention System 2.0 - Booklet M</p> <p>EnVision: Intervention Clusters 16 & 17</p> <p>Freckle: Ratios & Proportions</p> <p>Envision: Enrichment (from each lesson)</p> <p>Khan Academy- Unit: Ratios, Rates, Proportions https://www.khanacademy.org/math/pre-algebra/pre-algebra-ratios-rates</p> <p>https://www.engageny.org/ Module 1</p>
<p>Week 9</p>	<p>Domain: The Number System, Expressions and Equations, and Geometry Area</p>	<p>c. Evaluate expressions at specific values of their variables. Include expressions that arise from formulas used in real-world problems. Perform arithmetic operations, including those involving whole-number exponents, in the conventional order when there are no parentheses to specify a particular order (Order of Operations). 6.EE.2c</p> <p>21. Find the area of right triangles, other triangles, special quadrilaterals, and polygons by composing into rectangles or decomposing into triangles and other shapes; apply these techniques in the context of solving real-world and mathematical problems. 6.G.1</p>	<p>Envision Topic 7: Solve Area, Surface Area, and Volume Problems</p> <ul style="list-style-type: none"> • Find Area of Parallelograms and Rhombuses (7-1) • Solve Triangle Area Problems (7-2) <p>MARS:</p> <ul style="list-style-type: none"> • Using Space Efficiently: Packing a Truck <p>EnVision: Math Diagnosis and Intervention System 2.0 - Booklet N</p> <p>EnVision: Intervention Clusters 19 & 20</p> <p>Freckle: Geometry</p> <p>Envision: Enrichment (from each lesson)</p> <p>Khan Academy- Unit: Geometry https://www.khanacademy.org/math/cc-sixth-grade-math/cc-6th-geometry-topic</p> <p>https://www.engageny.org/ Module 5</p>

<p>Week 10</p>	<p>Area</p>	<p>c. Find and position integers and other rational numbers on a horizontal or vertical number line diagram; find and position pairs of integers and other rational numbers on a coordinate plane. 6.NS.6c</p> <p>11. Solve real-world and mathematical problems by graphing points in all four quadrants of the coordinate plane. Include use of coordinates and absolute value to find distances between points with the same first coordinate or the same second coordinate. 6.NS.8</p> <p>c. Evaluate expressions at specific values of their variables. Include expressions that arise from formulas used in real-world problems. Perform arithmetic operations, including those involving whole-number exponents, in the conventional order when there are no parentheses to specify a particular order (Order of Operations). 6.EE.2c</p> <p>21. Find the area of right triangles, other triangles, special quadrilaterals, and polygons by composing into rectangles or decomposing into triangles and other shapes; apply these techniques in the context of solving real-world and mathematical problems. 6.G.1</p> <p>23. Draw polygons in the coordinate plane given coordinates for the vertices; use coordinates to find the length of a side joining points with the same first coordinate or the same second coordinate. Apply these techniques in the context of solving real-world and mathematical problems. 6.G.3</p>	<ul style="list-style-type: none"> • Find Area of Trapezoids and Kites (7-3) • Find Area of Polygons (7-4) <p>EnVision: Math Diagnosis and Intervention System 2.0- Booklet N</p> <p>EnVision: Intervention Clusters 19 & 20</p> <p>Freckle: Geometry</p> <p>EnVision: Enrichment (from each lesson)</p> <p>Khan Academy- Unit: Geometry https://www.khanacademy.org/math/cc-sixth-grade-math/cc-6th-geometry-topic</p> <p>https://www.engageny.org/ Module 5</p>
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4th 9 – weeks (March 15 – May 28)
 46 instructional days; 23 A-Days and 23 B-Days
 +4 Exam Days

Time Period	Unit Topic	Standards	Resources
<p>Week 1</p> <p>Note: Days in this block are set aside for review and testing of Topic 7</p>	<p style="text-align: center;">Domain: Expressions and Equations and Geometry Surface Area</p>	<p>24. Represent three-dimensional figures using nets made up of rectangles and triangles, and use the nets to find the surface area of these figures. Apply these techniques in the context of solving real world and mathematical problems. 6.G.4</p> <p>a. Write expressions that record operations with numbers and with letters standing for numbers. 6.EE.2a</p> <p>c. Evaluate expressions at specific values of their variables. Include expressions that arise from formulas used in real-world problems. Perform arithmetic operations, including those involving whole-number exponents, in the conventional order when there are no parentheses to specify a particular order (Order of Operations). 6.EE.2c</p> <p>17. Use variables to represent numbers and write expressions when solving a real-world or mathematical problem; understand that a variable can represent an unknown number or, depending on the purpose at hand, any number in a specified set. 6.EE.6</p>	<p>Envision Topic 7-contiuned</p> <ul style="list-style-type: none"> • Represent Solid Figures Using Nets (7-5) • Find Surface Area of Prisms (7-6) <p>GeoGebra Links:</p> <ul style="list-style-type: none"> • Surface Area: Intuitive Introduction <p>EnVision: Math Diagnosis and Intervention System 2.0- Booklet N</p> <p>EnVision: Intervention Cluster 20</p> <p>Freckle: Geometry</p> <p>EnVision: Enrichment (from each lesson)</p> <p>Khan Academy- Unit: Geometry https://www.khanacademy.org/math/cc-sixth-grade-math/cc-6th-geometry-topic</p> <p>https://www.engageny.org/ Module 5</p>

<p>Week 2</p>	<p>Surface Area and Volume</p>	<p>22. Find the volume of a right rectangular prism with fractional edge lengths by packing it with unit cubes of the appropriate unit fraction edge lengths, and show that the volume is the same as would be found by multiplying the edge lengths of the prism. Apply the formulas $V = lwh$ and $V = Bh$ to find volumes of right rectangular prisms with fractional edge lengths in the context of solving real world and mathematical problems. 6.G.2</p> <p>24. Represent three-dimensional figures using nets made up of rectangles and triangles, and use the nets to find the surface area of these figures. Apply these techniques in the context of solving real world and mathematical problems. 6.G.4</p> <p>a. Write expressions that record operations with numbers and with letters standing for numbers. 6.EE.2a</p> <p>c. Evaluate expressions at specific values of their variables. Include expressions that arise from formulas used in real-world problems. Perform arithmetic operations, including those involving whole-number exponents, in the conventional order when there are no parentheses to specify a particular order (Order of Operations). 6.EE.2c</p> <p>17. Use variables to represent numbers and write expressions when solving a real-world or mathematical problem; understand that a variable can represent an unknown number or, depending on the purpose at hand, any number in a specified set. 6.EE.6</p>	<ul style="list-style-type: none"> • Find Surface Area of Pyramids (7-7) • Find Volume with Fractional Edge Lengths (7-8) <p>EnVision: Math Diagnosis and Intervention System 2.0- Booklet N</p> <p>EnVision: Intervention Cluster 20</p> <p>Freckle: Geometry</p> <p>Envision: Enrichment (from each lesson)</p> <p>Khan Academy- Unit: Geometry https://www.khanacademy.org/math/cc-sixth-grade-math/cc-6th-geometry-topic</p> <p>https://www.engageny.org/ Module 5</p>
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<p>Week 3</p> <p>Note: Days in this block are set aside for review and testing of Topic 8</p>	<p>Domain: Statistics and Probability Statistical Questions and Measures of Central Tendency</p>	<p>25. Recognize a statistical question as one that anticipates variability in the data related to the question and accounts for it in the answers. 6.SP.1</p> <p>27. Recognize that a measure of center for a numerical data set summarizes all of its values with a single number, while a measure of variation describes how its values vary with a single number. 6.SP.3</p> <p>28. Display numerical data in plots on a number line, including dot plots, histograms, and box plots. 6.SP.4</p> <p>c. Giving quantitative measures of center (median and/or mean) and variability (interquartile range and/or mean absolute deviation) as well as describing any overall pattern and any striking deviations from the overall pattern with reference to the context in which the data were gathered. 6.SP.5c</p>	<p>Envision Topic 8: Display, Describe, and Summarize Data</p> <ul style="list-style-type: none"> Recognize Statistical Questions (8-1) Summarize Data Using Mean, Median, Mode and Range (8-2) <p>MARS:</p> <ul style="list-style-type: none"> Representing Variability with Mean, Median, Mode and Range <p>EnVision: Math Diagnosis and Intervention System 2.0- Booklet N</p> <p>Freckle: Statistics & Probability</p> <p>Envision: Enrichment (from each lesson)</p> <p>Khan Academy- Unit: Data and Statistics https://www.khanacademy.org/math/cc-sixth-grade-math/cc-6th-data-statistics</p> <p>https://www.engageny.org/ Module 6</p>
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<p>Week 4</p>	<p>Data Display</p>	<p>28. Display numerical data in plots on a number line, including dot plots, histograms, and box plots. 6.SP.4 a. Reporting the number of observations. 6.SP.5a</p>	<ul style="list-style-type: none"> • Display Data in Box Plots (8-3) • Display Data Frequency Tables and Histograms (8-4) <p>Note: There should be a mid-point check between lessons Display Data Frequency Tables and Histograms (8-4) and Summarize Data Using Measures of Variability (8-5)</p> <p>MARS:</p> <ul style="list-style-type: none"> • Representing Data with Grouped Frequency Graphs and Box Plots <p>EnVision: Math Diagnosis and Intervention System 2.0- Booklet N</p> <p>Freckle: Statistics & Probability</p> <p>Envision: Enrichment (from each lesson)</p> <p>Khan Academy- Unit: Data and Statistics https://www.khanacademy.org/math/cc-sixth-grade-math/cc-6th-data-statistics</p> <p>https://www.engageny.org/ Module 6</p>
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<p>Week 5</p>	<p>Variability</p>	<p>28. Display numerical data in plots on a number line, including dot plots, histograms, and box plots. 6.SP.4 c. Giving quantitative measures of center (median and/or mean) and variability (interquartile range and/or mean absolute deviation) as well as describing any overall pattern and any striking deviations from the overall pattern with reference to the context in which the data were gathered. 6.SP.5c d. Relating the choice of measures of center and variability to the shape of the data distribution and the context in which the data were gathered. 6.SP.5d</p>	<ul style="list-style-type: none"> Summarize Data Using Measures of Variability (8-5) Choose Appropriate Statistical Measures (8-6) <p>MARS:</p> <ul style="list-style-type: none"> Candy Bars <p>EnVision: Math Diagnosis and Intervention System 2.0- Booklet N</p> <p>Freckle: Statistics & Probability</p> <p>Envision: Enrichment (from each lesson)</p> <p>Khan Academy- Unit: Summarizing Quantitative Data https://www.khanacademy.org/math/statistics-probability/summarizing-quantitative-data</p> <p>https://www.engageny.org/ Module 6</p>
<p>Week 6</p>	<p>Summarize Data</p>	<p>26. Understand that a set of data collected to answer a statistical question has a distribution which can be described by its center, spread, and overall shape. 6.SP.2 28. Display numerical data in plots on a number line, including dot plots, histograms, and box plots. 6.SP.4 b. Describing the nature of the attribute under investigation, including how it was measured and its units of measurement. 6.SP.5b c. Giving quantitative measures of center (median and/or mean) and variability (interquartile range and/or mean absolute deviation) as well as describing any overall pattern and any striking deviations from the overall pattern with reference to the context in which the data were gathered. 6.SP.5c</p>	<ul style="list-style-type: none"> Summarize Data Distributions (8-7) <p>EnVision: Math Diagnosis and Intervention System 2.0- Booklet N</p> <p>Freckle: Statistics & Probability</p> <p>Envision: Enrichment (from each lesson)</p> <p>Khan Academy- Unit: Data and Statistics https://www.khanacademy.org/math/cc-sixth-grade-math/cc-6th-data-statistics</p> <p>https://www.engageny.org/ Module 6</p>

Week 7		6 th Grade Assessments	
Week 8		*This week will be devoted to introducing students to seventh grade power standards and remediating standards that proved difficult for students.	
Week 9		*This week will be devoted to introducing students to seventh grade power standards and remediating standards that proved difficult for students.	