6th Grade Mathematics Map/Pacing Guide
2019-2020

| Topics & Standards

Quarter 1

Unit 1 (lessons 1-5)

Time Frame 5 Weeks | **Mathematical Practices Handbook**
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.

RATIOS AND PROPORTIONAL RELATIONSHIPS
Understand ratio concepts and use ratio reasoning to solve problems.
● **6.RP.1** Understand the concept of a ratio and use ratio language to describe a ratio relationship between two quantities. For example, "The ratio of wings to beaks in the bird house at the zoo was 2:1, because for every 2 wings there was 1 beak." "For every vote candidate A received, candidate C received nearly three votes."
● **6.RP.2** Understand the concept of a unit rate a/b associated with a ratio a:b with b ≠ 0, and use rate language in the context of a ratio relationship. For example, "This recipe has a ratio of 3 cups of flour to 4 cups of sugar, so there is ¾ cup of flour for each cup of sugar." "We paid $75 for 15 hamburgers, which is a rate of $5 per hamburger."[1]
● **6.RP.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.
    ○ 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.
    ○ b. Solve unit rate problems including those involving unit pricing and constant speed. For example, if it took 7 hours to mow 4 lawns, then at that rate, how many lawns could be mowed in 35 hours? At what rate were lawns being mowed?
    ○ 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. d. Use ratio reasoning to convert measurement units; manipulate and transform units appropriately when multiplying or dividing quantities. |

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SPIRAL REVIEW
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- **iReady**
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MAJOR **SUPPORTING** **ADDITIONAL**

Students should spend the majority of learning on the major work of the grade level; which should account for at least 65% of the academic year (Achieve the core, n.d.). **Major content should be emphasized via a greater number of days of instruction, depth and mastery.**

Assessment (Evidence)	*Key Concepts and Skills*	*Curriculum & Textbook Resources*	*Key Concept tools & practices*
Formative Assessment: Independent Practice End of Lesson Quizzes Homework Checks **Lesson Quizzes** Lesson 1/Day 4 Lesson 2/Day 5 Lesson 3/Day 5 Lesson 4/Day 5 Lesson 5/Day 5 **Ready Ohio Math Assessment Resources** - i-Ready Diagnostic (fall, winter, spring) - Unit Self-check	- Write a ratio to describe the relationship between two quantities. - Find the rate and unit rate associated with a given ratio. - Compare ratios and find equivalent ratios - Solve unit rate problems - Solve percent problems	**Ready Ohio** **Practice and Problem Solving Pages (Student)** pg. 3-48 **iReady Lessons (online)** 15 - 20 min per lesson **Ready Teacher Resource Book** pg. 1a - 50b **Unit Lessons** - Lesson 1: Ratios 6.RP.1 ***Lesson 2: Understand Unit Rate 6.RP.2, 6.RP.1, 6.RP.3a, 6.RP.3b, 6.RP.3d*** - Lesson 3: Equivalent Ratios 6.RP.3a	**Available on Teacher Toolbox:** - Interactive Tutorials - Prerequisite Ready Lessons - Tools for Instruction - Math Center Activities - Think-Share-Compare Routine (under Program Implementation) - Ready-Central (Instructional Best Practices Videos - http://readycentral.com/ - Journals / Provisional Writing

	Summative Assessment **Unit 1 Interim Assessment**		● Lesson 4 Solve Problems with Unit Rate 6.RP.3b, 6.RP.3d ● Lesson 5: Solve Problems with Percent 6.RP.3c, 6.RP.3a, 6.RP.3b	● Math Models ● Discourse Cards

Topics & Standards

Quarter 1

Unit 2 (lessons 6-8)

Time Frame 3 Weeks

The Number System

Apply and extend previous understandings of multiplication and division to divide fractions by fractions.
- **6.NS.1** Interpret and compute quotients of fractions, and solve word problems involving division of fractions by fractions, e.g., by using visual fraction models and equations to represent the problem. For example, create a story context for (2/3) ÷ (¾) and use a visual fraction model to show the quotient; use the relationship between multiplication and division to explain that (2/3) ÷ (¾) = 8/9 because ¾ of 8/9 is 2/3. (In general, (a/b) ÷ (c/d) = ad/bc.) How much chocolate will each person get if 3 people share ½ lb of chocolate equally? How many ¾-cup servings are in 2/3 of a cup of yogurt? How wide is a rectangular strip of land with length ¾ mi and area ½ square mi?

Compute fluently with multi-digit numbers and find common factors and multiples.
- **6.NS.2** Fluently divide multi-digit numbers using the standard algorithm.

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Assessment (Evidence)	*Key Concepts and Skills*	*Curriculum & Textbook Resources*	*Key Concept tools & practices*
Formative Assessment: Independent Practice End of Lesson Quizzes Homework Checks	➢ Explain how to divide fractions, for example; explain why $\frac{2}{3} \div \frac{3}{4} = \frac{8}{9}$.	**Ready Ohio** **Practice and Problem Solving Pages (Student)** pg. 59 - 86.	**Available on Teacher Toolbox:** ● Interactive Tutorials ● Prerequisite Ready Lessons

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	Lesson Quizzes Lesson 6/Day 4 Lesson 7/Day 5 Lesson 8/Day 5 **Ready Ohio Math Assessment Resources** ●i-Ready Diagnostic (fall, winter, spring) ● Unit Self-check **Summative Assessment** **Unit 1 Interim Assessment**	➢ Divide multi-digit whole numbers, for example; $26{,}304 \div 24 = 1{,}096$.	**iReady Lessons (online)** 15 - 20 min per lesson **Ready Teacher Resource Book** pg. 51a - 70b **Unit Lessons** ● ***Lesson 6: Understand Division with Fractions 6.NS.1*** ● Lesson 7: Divide with Fractions 6.NS.1 ● Lesson 8: Divide Multi-Digit Numbers 6.NS.2	● Tools for Instruction ● Math Center Activities ● Think-Share-Compare Routine (under Program Implementation) ● Ready-Central (Instructional Best Practices Videos ● http://readycentral.com/ ● Journals / Provisional Writing ● Math Models ● Discourse Cards
Topic& Standard *Quarter 2* *Unit 2 Continued (lessons 9 - 14)* *Time Frame 7 Weeks*	**The Number System** **Apply and extend previous understandings of multiplication and division to divide fractions by fractions.** ● **6.NS.1** Interpret and compute quotients of fractions, and solve word problems involving division of fractions by fractions, e.g., by using visual fraction models and equations to represent the problem. For example, create a story context for (2/3) ÷ (¾) and use a visual fraction model to show the quotient; use the relationship between multiplication and division to explain that (2/3) ÷ (¾) = 8/9 because ¾ of 8/9 is 2/3. (In general, (a/b) ÷ (c/d) = ad/bc.) How much chocolate will each person get if 3 people share ½ lb of chocolate equally? How many ¾-cup servings are in 2/3 of a cup of yogurt? How wide is a rectangular strip of land with length ¾ mi and area ½ square mi? **Compute fluently with multi-digit numbers and find common factors and multiples.** ● **6.NS.2** Fluently divide multi-digit numbers using the standard algorithm. ● **6.NS.3** Fluently add, subtract, multiply, and divide multi-digit decimals using the standard algorithm for each operation. ● **6.NS.4** Find the greatest common factor of two whole numbers less than or equal to 100 and the least common multiple of two who 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 a multiple of a sum of two whole numbers with no common factor. For example, express 36 + 8 as 4 (9 + 2). **Apply and extend previous understandings of numbers to the system of rational numbers.** ● **6.NS.5** 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.6** 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.		

	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.
	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.
	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.7** Understand ordering and absolute value of rational numbers.
	a) Interpret statements of inequality as statements about the relative position of two numbers on a number line diagram. For example, interpret –3 > –7 as a statement that –3 is located to the right of –7 on a number line oriented from left to right.
	b) Write, interpret, and explain statements of order for rational numbers in real-world contexts. For example, write –3 ˚C > –7˚C to express the fact that –3˚C is warmer than –7˚C.
	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. For example, for an account balance of –30 dollars, write |−30| = 30 to describe the size of the debt in dollars.
	d) Distinguish comparisons of absolute value from statements about order. For example, recognize that an account balance less than −30 dollars represents a debt greater than 30 dollars.
	● **6.NS.8.** 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.
	SPIRAL REVIEW
	● **Bell Work**
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	Assessment (Evidence)	*Key Concepts and Skills*	*Curriculum & Textbook Resources*	*Key Concept tools & practices*
	Formative Assessment: Independent Practice End of Lesson Quizzes Homework Checks	➢ Divide multi-digit whole numbers, for example 26,304 ÷ 24 = 1,096.	**Ready Ohio** **Practice and Problem Solving Pages (Student)** pg. 89-96	**Available on Teacher Toolbox:** ● Interactive Tutorials ● Prerequisite Ready Lessons ● Tools for Instruction

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	Lesson Quizzes Lesson 9/Day 4 Lesson 10/Day 4 Lesson 11/Day 4 Lesson 12/Day 4 Lesson 13/Day 4 Lesson 14/Day 4 **Ready Ohio Math Assessment Resources** ● i-Ready Diagnostic (fall, winter, spring) ● Unit Self-check **Summative Assessment** **Unit 2 Interim Assessment**	➤ Add and subtract multi-digit decimals, for example $3.1 - 1.534 = 1.566$. ➤ Multiply and divide decimals, for example $32.5 \div 0.25 = 130$ ➤ Find common factors and common multiples, for example: common factors of 4 and 6 are 1 and 2, and common multiples are 12 and 24. ➤ Recognize real-world uses for negative numbers and locate them on a number line. ➤ order integers and find absolute value, for example: $-7 < -5 \ and \ -5 < 2$. ➤ Plot points in 4 quadrants of the coordinate plane.	**iReady Lessons (online)** 15 - 20 min per lesson **Ready Teacher Resource Book** pg. 80a-139c **Unit Lessons** ● Lesson 9: Add & Subtract Decimals ● Lesson 10: Multiply & Divide Decimals ● Lesson 11 Common Factors and Multiples: ● Lesson 12: Understand Positive & Negative Numbers ● Lesson 13: Absolute Value and Ordering Numbers ● Lesson 14: The Coordinate Plane	● Math Center Activities ● Think-Share-Compare Routine (under Program Implementation) ● Ready-Central (Instructional Best Practices Videos ● http://readycentral.com/ ● Journals / Provisional Writing ● Math Models ● Discourse Cards

Topic & Standard
 	
Quarter 2
 	
Unit 3 (lesson 15)
 	
Time Frame 1 Week
	EXPRESSIONS AND EQUATIONS
	Apply and extend previous understandings of arithmetic to algebraic expressions.
	 ● **6.EE.1** Write and evaluate numerical expressions involving whole-number exponents.
	
	SPIRAL REVIEW
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	Formative Assessment: Independent Practice End of Lesson Quizzes Homework Checks **Lesson Quizzes** Lesson 15/Day 4 **Ready Ohio Math Assessment Resources** ● i-Ready Diagnostic (fall, winter, spring) ● Unit Self-check **Summative Assessment** **Unit 3 Interim Assessment**	➢ Evaluate numerical expressions that contain exponents, for example, $2^4 + 6 = 22$	**Ready Ohio** **Practice and Problem Solving Pages (Student)** pg. 161-168 **iReady Lessons (online)** 15 - 20 min per lesson **Ready Teacher Resource Book** pg. 144a-153c **Unit Lessons** Lesson 15: Numerical Expressions with Exponents	**Available on Teacher Toolbox:** ● Interactive Tutorials ● Prerequisite Ready Lessons ● Tools for Instruction ● Math Center Activities ● Think-Share-Compare Routine (under Program Implementation) ● Ready-Central (Instructional Best Practices Videos ● http://readycentral.com/ ● Journals / Provisional Writing ● Math Models ● Discourse Cards

Topic & Standard Quarter 3
 	
Unit 3 (lessons 16-21) *Time Frame 5 Weeks*
	UNIT 3
	Equations and Expressions
	Apply and extend previous understandings of arithmetic to algebraic expressions
	● **6.EE.2** Write, read, and evaluate expressions in which letters stand for numbers.
	    a) Write expressions that record operations with numbers and with letters standing for numbers. For example, express the calculation "Subtract y from 5" as 5 − y.
	    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. For example, describe the expression 2 (8 + 7) as a product of two factors; view (8 + 7) as both a single entity and a sum of two terms.
	    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, using the algebraic order of operations when there are no parentheses to specify a particular order. For example, use the formulas V = s³ and A = 6s² to find the volume and surface area of a cube with sides of length s = 1/2.

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- **6.EE.3** Apply the properties of operations to generate equivalent expressions. For example, apply the distributive property to the expression 3 (2 + x) to produce the equivalent expression 6 + 3x; apply the distributive property to the expression 24x + 18y to produce the equivalent expression 6 (4x + 3y); apply properties of operations to y + y + y to produce the equivalent expression 3y.
- **6.EE.4** Identify when two expressions are equivalent (i.e., when the two expressions name the same number regardless of which value is substituted into them). For example, the expressions y + y + y and 3y are equivalent because they name the same number regardless of which number y stands for. Reason about and solve one-variable equations and inequalities.
- **6.EE.5** 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.6** 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. 7. 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.8** 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.

Represent and analyze quantitative relationships between dependent and independent variables.
- **6.EE.9** 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. For example, in a problem involving motion at constant speed, list and graph ordered pairs of distances and times, and write the equation d = 65t to represent the relationship between distance and time

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	Formative Assessment: Independent Practice End of Lesson Quizzes Homework Checks **Lesson Quizzes** Lesson 16/Day 5 Lesson 17/Day 5 Lesson 18/Day 3 Lesson 19/Day 5 Lesson 20/Day 3 Lesson 21/Day 5 **Ready Ohio Math Assessment Resources** ●i-Ready Diagnostic (fall, winter, spring) ● Unit Self-check **Summative Assessment** **Unit 3 Interim Assessment**	➢ Interpret and evaluate algebraic expressions, for example: 2(8+7) means twice the sum of 8 and 7. ➢ Solve equations, for example: if $3 = \frac{1}{2}k, then\ k\ =\ 6.$ ➢ Solve inequalities, for example: If $3x \geq 15, then\ x \geq 5.$ ➢ Use equations and inequalities to solve word problems. ➢ Write equations to show the relationship between dependent and independent variables.	**Ready Ohio** **Practice and Problem Solving Pages (Student)** pg. 171-232 **iReady Lessons (online)** 15 - 20 min per lesson **Ready Teacher Resource Book** pg. 154a-215c **Unit 3 Lessons** ●Lesson 16: Algebraic Expressions (6.EE.2a, 6.EE.2b, 6.EE.2c, 6.EE.6) ●Lesson 17: Equivalent Expressions (6.EE.3, 6.EE.4, 6.EE.6) ●*Lesson 18: Understand Solutions to Equations* **(6.EE.5, 6.EE.6)** ●Lesson 19: Solve Equations (6.EE.6, 6.EE.7, 6.EE.5) ●Lesson 20: Solving Inequalities (6.EE.5, 6.EE.8, 6.NS.6, 6.EE.7) ●Lesson 21: Dependent and Independent Variables (6.EE.9, 6.EE.6)	**Available on Teacher Toolbox:** ● Interactive Tutorials ● Prerequisite Ready Lessons ● Tools for Instruction ● Math Center Activities ● Think-Share-Compare Routine (under Program Implementation) ● Ready-Central (Instructional Best Practices Videos ● http://readycentral.com/ ● Journals / Provisional Writing ● Math Models ● Discourse Cards
Topic & Standard *Quarter 3* *Unit 4*	<u>Geometry</u> **Solve real-world and mathematical problems involving area, surface area, and volume** ● 6.G.1 Through composition into rectangles or decomposition into triangles, find the area of right triangles, other triangles, special quadrilaterals, and polygons; apply these techniques in the context of solving real-world and mathematical problems. ● 6.G.3 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.4 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			

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Time Frame 3 Weeks	**Equations and Expressions**
	Apply and extend previous understandings of arithmetic to algebraic expressions
	● <mark>6.EE.2</mark> Write, read, and evaluate expressions in which letters stand for numbers.
	    a) 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). For example, use the formulas $V = s^3$ and $A = 6 s^2$ to find the volume and surface area of a cube with sides of length s = ½.
	● <mark>6.EE.6</mark> 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. 7. 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.
	
	SPIRAL REVIEW
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	Formative Assessment: **Independent Practice**	➢ Find the area of triangles, quadrilaterals, and other polygons.	**Ready Ohio** **Practice and Problem Solving Pages (Student)** pg. 247-276	**Pacing Available on Teacher Toolbox:** • Interactive Tutorials • Prerequisite Ready Lessons
	Lesson Quizzes Lesson 22/Day 4 Lesson 23/Day 5 Lesson 24/Day 5	➢ Solve problems with polygons in the coordinate plane. ➢ Use nets to find the surface area of three-dimensional figures.	**iReady Lessons (online)** 15 - 20 min per lesson	• Tools for Instruction • Math Center Activities • Think-Share-Compare Routine (under Program Implementation)
	Ready Ohio Math Assessment Resources ● i-Ready Diagnostic (fall, winter, spring) ● Unit Self-check		**Ready Teacher Resource Book** pg. 220a-251c __**Unit 4 Lessons**__ Lesson 22: Area of Polygons Lesson 23: Polygons in the Coordinate Plane Lesson 24: Nets & Surface Area	• Ready-Central (Instructional Best Practices Videos • http://readycentral.com/ • Journals / Provisional Writing • Math Models • Discourse Cards

Topic & Standard *Quarter 4* *Unit 4 (lesson 25)* *Time Frame 1 ½ Weeks*	**Geometry** **Solve real-world and mathematical problems involving area, surface area, and volume**
	 ● **6.G.2**. 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 $V = l\,w\,h$ and $V = b\,h$ to find volumes of right rectangular prisms with fractional edge lengths in the context of solving real-world and mathematical problems.
	 SPIRAL REVIEW
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	Formative Assessment: **Independent Practice** **Lesson Quizzes** Lesson 25/Day 4 **Ready Ohio Math** **Assessment Resources** ●i-Ready Diagnostic (fall, winter, spring) ● Unit Self-check **Summative Assessment** **Unit 4 Interim Assessment**	➢Find the volume of a rectangular prism with fractional edge lengths, for example: the volume of a cube with edges ½ inch is ⅛ cubic inch.	**Ready Ohio** **Practice and Problem Solving Pages (Student)** pg. 279-286 **iReady Lessons (online)** 15 - 20 min per lesson **Ready Teacher Resource Book** pg. 252a-261c **Unit 4 Lesson** **Lesson 25:** Volume	**Available on Teacher Toolbox:** ● Interactive Tutorials ● Prerequisite Ready Lessons ● Tools for Instruction ● Math Center Activities ● Think-Share-Compare Routine (under Program Implementation) ● Ready-Central (Instructional Best Practices Videos ● http://readycentral.com/ ● Journals / Provisional Writing ● Math Models ● Discourse Cards

Topic & Standard
 	
 Quarter 4
 	
 Unit 5
 (lessons 26-29)
 Time Frame
 4 Weeks
	Statistics and Probability
	 Develop understanding of statistical variability.
	 ● **6.SP.1** Develop statistical reasoning by using the GAISE model:
	     a. Formulate Questions: Recognize and formulate a statistical question as one that anticipates variability and can be answered with quantitative data. For example, "How old am I?" is not a statistical question, but "How old are the students in my school?" is a statistical question because of the variability in students' ages. (GAISE Model, step 1)
	     b. Collect Data: Design and use a plan to collect appropriate data to answer a statistical question. (GAISE Model, step 2)
	     c. Analyze Data: Select appropriate graphical methods and numerical measures to analyze data by displaying variability within a group, comparing individual to individual, and comparing individual to group. (GAISE Model, step 3)
	     d. Interpret Results: Draw logical conclusions from the data based on the original question. (GAISE Model, step 4)
	 ● **6.SP.2** 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.3** 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. Summarize and describe distributions.
	 ● **6.SP.4** Display numerical data in plots on a number line, including dot plots, line plots, histograms, & box plots. (GAISE Model, step 3)
	 ● **6.SP.5** Summarize numerical data sets in relation to their context
	     o a. Report the number of observations.
	     o b. Describe the nature of the attribute under investigation, including how it was measured and its units of measurement.

	o c. Find the quantitative measures of center (median and/or mean) for a numerical data set and recognize that this value summarizes the data set with a single number. Interpret mean as an equal or fair share. Find measures of variability (range and interquartile range) as well as informally describe the shape & presence of clusters, gaps, peaks, and outliers in a distribution.
	o d. Choose the measures of center and variability, based on the shape of the data distribution and the context in which the data were gathered.
	SPIRAL REVIEW
	● **Bell Work**
	  ○ Standards covered during Bell Work will be based on prerequisites for the current concept as well as data from our weekly Illuminate Assessments.
	● **iReady**
	  ○ Students are assigned lessons based on their academic needs, not necessarily the current standards being taught. Students have a goal of obtaining at least 45 minutes/week on iReady and maintaining a 70% or higher passing rate. Students' time on iReady is actively monitored to ensure they are working diligently and accurately.

<mark>MAJOR</mark> <mark>SUPPORTING</mark> <mark>ADDITIONAL</mark>
Students should spend the majority of learning on the major work of the grade level; which should account for at least 65% of the academic year (Achieve the core, n.d.). **Major content should be emphasized via a greater number of days of instruction, depth and mastery.**

	Assessment (Evidence)	*Key Concepts and Skills*	*Curriculum & Textbook Resources*	*Key Concept tools & practices*
	Formative Assessment: **Independent Practice** **Lesson Quizzes** Lesson 26/Day 4 Lesson 27/Day 5 Lesson 28/Day 5 Lesson 29/Day 5 **Ready Ohio Math** **Assessment Resources** ● i-Ready Diagnostic (fall, winter, spring) ● Unit Self-check **Summative Assessment** **Unit 5 Interim Assessment**	➢ Recognize what makes a question a statistical question. ➢ Calculate measures of center such as mean and median. ➢ Calculate measures of spread such as range & interquartile range. ➢ Display data accurately with a dot plot, histogram or box plot. ➢ Describe data using measures of center and measures of spread. ➢ Describe the shape of a data distribution and the presence of clusters, gaps, peaks and outliers in a distribution. ➢ Apply the GAISE model to solve statistical questions.	**Ready Ohio** **Practice and Problem Solving Pages (Student)** pg. 297-336 **iReady Lessons (online)** 15 - 20 min per lesson **Ready Teacher Resource Book** pg. 266a-305c **Unit 5 Lesson** Lesson 26: Understand Statistical Questions Lesson 27: Measures of Center & Variability Lesson 28: Display Data on Dot Plots, Histograms, and Box Plots Lesson 29: Analyze Numerical Data	**Available on Teacher Toolbox:** ● Interactive Tutorials ● Prerequisite Ready Lessons ● Tools for Instruction ● Math Center Activities ● Think-Share-Compare Routine (under Program Implementation) ● Ready-Central (Instructional Best Practices Videos ● http://readycentral.com/ ● Journals / Provisional Writing ● Math Models ● Discourse Cards