Pacing Guide

Mathematics 6th Grade

Unit 1 – **Ratios and Proportional Relationships**   **Total Number of Instructional Days   24**

Common Core Standard Covered	Major Topics/Concepts	Number of days
1-1 **Ratios** CCSS.MATH.CONTENT.6.RP.A.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."*	3
1-2 **Unit Rate** CCSS.MATH.CONTENT.6.RP.A.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 3/4 cup of flour for each cup of sugar." "We paid $75 for 15 hamburgers, which is a rate of $5 per hamburger."*	3

1-3   **Equivalent Ratios and Tables**

CCSS.MATH.CONTENT.6.RP.A.3
CCSS.MATH.CONTENT.6.RP.A.3.A

- 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.
- 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.

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1-4   **Comparing Ratios**

CCSS.MATH.CONTENT.6.RP.A.3
CCSS.MATH.CONTENT.6.RP.A.3.A

- 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.
- 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.

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1-5   **Proportions**

CCSS.MATH.CONTENT.6.RP.A.3
CCSS.MATH.CONTENT.6.RP.A.3.A

- 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.
- 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.

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1-6	**Percent and Rates Per 100** CCSS.MATH.CONTENT.6.RP.A.3.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.	**3**
1-7	**A Fraction as a Percent** CCSS.MATH.CONTENT.6.RP.A.3.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.	**3**
1.8	**Ratio and Measurement Units** CCSS.MATH.CONTENT.6.RP.A.3.D	• Use ratio reasoning to convert measurement units; manipulate and transform units appropriately when multiplying or dividing quantities.	**3**

Unit 2 –   Operations of Fractions and Decimals   Total Number of Instructional Days   28

	Common Core Standard Covered	**Major Topics/Concepts**	**Number of Days**
2-1	**Dividing Fractions** CCSS.MATH.CONTENT.6.NS.A.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.	**3**

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| 2-2 | Dividing Whole Number and Fractions | • 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. | 4 |

CCSS.MATH.CONTENT.6.NS.A.1

| 2-3 | Dividing Mixed Numbers and Fractions | • 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. | 4 |

CCSS.MATH.CONTENT.6.NS.A.1

| 2-4 | Dividing Multi-Digit Numbers | • Fluently divide multi-digit numbers using the standard algorithm. | 4 |

CCSS.MATH.CONTENT.6.NS.B.2

| 2-5 | Add and Subtract Multi-Digit Decimals | • Fluently add, subtract, multiply, and divide multi-digit decimals using the standard algorithm for each operation. | 3 |

CCSS.MATH.CONTENT.6.NS.B.3

| 2-6 | Multiply and Divide Multi-Digit Decimals | • Fluently add, subtract, multiply, and divide multi-digit decimals using the standard algorithm for each operation. | 3 |

CCSS.MATH.CONTENT.6.NS.B.3

2-7	**Least Common Multiple and Greatest Common Factor** CCSS.MATH.CONTENT.6.NS.B.4	• 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.	4
2-8	**The Distributive Property and the Products of Decimals** CCSS.MATH.CONTENT.6.NS.B.4	• 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.	3

Unit 3 – Rational Numbers   Total Number of Instructional Days   25

	Common Core Standard Covered	**Major Topics/Concepts**	**Number of Days**
3-1	**Positive and Negative Numbers** CCSS.MATH.CONTENT.6.NS.C.5 CCSS.MATH.CONTENT.6.NS.C.6.A	• 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. • Recognize opposite signs of numbers as indicating locations on	3

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.

3-2   Operations on Positive and Negative Numbers

CCSS.MATH.CONTENT.6.NS.C.5
CCSS.MATH.CONTENT.6.NS.C.6.A

- 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.
- 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.

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3-3   Rational Numbers

CCSS.MATH.CONTENT.6.NS.C.7
CCSS.MATH.CONTENT.6.NS.C.7.A

- Understand ordering and absolute value of rational numbers.
- 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*.

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3-4   Writing and Interpreting Inequalities in Rational Numbers

CCSS.MATH.CONTENT.6.NS.C.7.A
CCSS.MATH.CONTENT.6.NS.C.7.B

- 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*.
- 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*.

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3-5	**Absolute Value of Rational Numbers**	• 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*.	**3**
	CCSS.MATH.CONTENT.6.NS.C.7.D		
3-6	**Rational Numbers and the Coordinate Plane**	• 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.	**3**
	CCSS.MATH.CONTENT.6.NS.C.8		
3-7	**Symmetry in the Coordinate Plane**	• 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.	**3**
	CCSS.MATH.CONTENT.6.NS.C.6.B		
3-8	**Distance on the Coordinate Plane**	• 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.	**3**
	CCSS.MATH.CONTENT.6.NS.C.6.B		

Unit 4 –   Expressions and Equations   **Total Number of Instructional Days   31**

Common Core Standard Covered	Major Topics/Concepts	Number of Days
4-1 The Relationship of Operations CCSS.MATH.CONTENT.6.EE.A.3 CCSS.MATH.CONTENT.6.EE.A.4	• 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.* • 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.*	3
4-2 Exponents CCSS.MATH.CONTENT.6.EE.A.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.*	3

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4-3	**The Order of Operations** CCSS.MATH.CONTENT.6.EE.A.2.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).	**4**
4-4	**Substitute Letters and Numbers** CCSS.MATH.CONTENT.6.EE.A.2.C CCSS.MATH.CONTENT.6.EE.A.4	• 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). • 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.*	**3**
4-5	**Expanded and Standard Form of Multiplication Expressions** CCSS.MATH.CONTENT.6.EE.A.2.A CCSS.MATH.CONTENT.6.EE.A.2.B	• Multiply or divide to solve word problems involving multiplicative comparison, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem, distinguishing multiplicative comparison from additive comparison. • 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.*	**3**

4-6   Equivalent Expressions

CCSS.MATH.CONTENT.6.EE.A.3
CCSS.MATH.CONTENT.6.EE.A.4
CCSS.MATH.CONTENT.6.EE.A.2.C

- 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.*

- 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.*

- 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 = 1/2.*

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4-7   Writing and Evaluating Expressions

CCSS.MATH.CONTENT.6.EE.A.2.A
CCSS.MATH.CONTENT.6.EE.A.2.C
CCSS.MATH.CONTENT.6.EE.B.6

- Multiply or divide to solve word problems involving multiplicative comparison, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem, distinguishing multiplicative comparison from additive comparison.

- 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 = 1/2.*

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- 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.

4-8 Solutions of Equations

CCSS.MATH.CONTENT.6.EE.B.5
CCSS.MATH.CONTENT.6.EE.B.6

- 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.

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- 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.

4-9 Solving One-Step Equations

CCSS.MATH.CONTENT.6.EE.B.5
CCSS.MATH.CONTENT.6.EE.B.6
CCSS.MATH.CONTENT.6.EE.B.7

- 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.

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- 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.

- 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.

4-10 **Solving Two-Step and Multi-Step Equations**

CCSS.MATH.CONTENT.6.EE.B.5
CCSS.MATH.CONTENT.6.EE.B.6
CCSS.MATH.CONTENT.6.EE.B.7

- 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.

- 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.

- 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.

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Unit 5 – Inequalities   Total Number of Instructional Days   15

Common Core Standard Covered	Major Topics/Concepts	Number of Days
5-1 **Inequalities** CCSS.MATH.CONTENT.6.EE.B.5 CCSS.MATH.CONTENT.6.NS.C.7.A CCSS.MATH.CONTENT.6.NS.C.7.B	• 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. • Interpret statements of inequality as statements about the relative position of two numbers on a number line diagram. • 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*	3

that -3 °C is warmer than -7 °C.

5-2   Solving One-Variable Inequalities
CCSS.MATH.CONTENT.6.EE.B.5
CCSS.MATH.CONTENT.6.EE.B.6
CCSS.MATH.CONTENT.6.EE.B.8

- 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.

- 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.

- 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.

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5-3   Solutions of Inequalities
CCSS.MATH.CONTENT.6.EE.B.5
CCSS.MATH.CONTENT.6.EE.B.8

- 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.
- 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.

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5-4   Solutions of Inequalities on a Number Line
CCSS.MATH.CONTENT.6.EE.B.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.

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5-5	**Applications of Inequalities**	• 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.	**3**
	CCSS.MATH.CONTENT.6.EE.B.8		

Unit 6 – Geometry   Total Number of Instructional Days   24

Common Core Standard Covered	**Major Topics/Concepts**	**Number of Days**
6-1 Area of Special Quadrilaterals CCSS.MATH.CONTENT.6.G.A.1	• 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.	**3**
6-2 Area of Right Triangles CCSS.MATH.CONTENT.6.G.A.1	• 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.	**3**
6-3 The Area of All Triangles CCSS.MATH.CONTENT.6.G.A.1	• 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.	**3**

6-4	**The Area of Polygons Through Composition and Decomposition** CCSS.MATH.CONTENT.6.G.A.1	• 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.	**3**
6-5	**Volume of Right Rectangular Prisms** CCSS.MATH.CONTENT.6.G.A.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.	**3**
6-6	**Polygons on the Coordinate Plane** CCSS.MATH.CONTENT.6.G.A.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.	**3**
6-7	**Perimeter and Area of Polygons on the Coordinate Plane** CCSS.MATH.CONTENT.6.G.A.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.	**3**

6-8 **Nets and Surface Area**	• 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.	**3**
CCSS.MATH.CONTENT.6.G.A.4		

Unit 7 – Data Displays   Total Number of Instructional Days **22**

Common Core Standard Covered	Major Topics/Concepts	Number of Days
7-1 **Statistical Questions** CCSS.MATH.CONTENT.6.SP.A.1	• Recognize a statistical question as one that anticipates variability in the data related to the question and accounts for it in the answers. *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 one anticipates variability in students' ages.*	3
7-2 **Data Distribution and Dot Plots** CCSS.MATH.CONTENT.6.SP.B.4	• Display numerical data in plots on a number line, including dot plots, histograms and box plots.	2
7-3 **Data Distribution and Histograms** CCSS.MATH.CONTENT.6.SP.B.4	• Display numerical data in plots on a number line, including dot plots, histograms and box plots.	2

7-4 **The Mean and Mean Absolute Deviation**

CCSS.MATH.CONTENT.6.SP.A.2
CCSS.MATH.CONTENT.6.SP.A.3
CCSS.MATH.CONTENT.6.SP.B.5.C

- 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.
- 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.
- 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.

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7-5 **The Median, Range, and Interquartile Range**

CCSS.MATH.CONTENT.6.SP.B.5
CCSS.MATH.CONTENT.6.SP.B.5.A
CCSS.MATH.CONTENT.6.SP.B.5.B
CCSS.MATH.CONTENT.6.SP.B.5.C
CCSS.MATH.CONTENT.6.SP.B.5.D

- Summarize numerical data sets in relation to their context, such as by:
- Reporting the number of observations.
- Describing the nature of the attribute under investigation, including how it was measured and its units of measurement.
- 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.
- 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.

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7-6 **Understanding Box Plots**

CCSS.MATH.CONTENT.6.SP.B.4
CCSS.MATH.CONTENT.6.SP.B.5

- Display numerical data in plots on a number line, including dot plots, histograms, and box plots.
- Summarize numerical data sets in relation to their context, such as by:
- Describing the nature of the attribute under investigation, including

3

CCSS.MATH.CONTENT.6.SP.B.5.A
CCSS.MATH.CONTENT.6.SP.B.5.B
CCSS.MATH.CONTENT.6.SP.B.5.C
CCSS.MATH.CONTENT.6.SP.B.5.D

how it was measured and its units of measurement.

- 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.

- 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.

7-7   Comparing Data Distributions

CCSS.MATH.CONTENT.6.SP.B.4
CCSS.MATH.CONTENT.6.SP.B.5
CCSS.MATH.CONTENT.6.SP.B.5.A
CCSS.MATH.CONTENT.6.SP.B.5.B
CCSS.MATH.CONTENT.6.SP.B.5.C
CCSS.MATH.CONTENT.6.SP.B.5.D

- Display numerical data in plots on a number line, including dot plots, histograms, and box plots.
- Summarize numerical data sets in relation to their context, such as by:
- Describing the nature of the attribute under investigation, including how it was measured and its units of measurement.
- 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.
- 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.

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7-8   Making a Statistical Project

CCSS.MATH.CONTENT.6.SP.A.1
CCSS.MATH.CONTENT.6.SP.B.5.A
CCSS.MATH.CONTENT.6.SP.B.5.B

- Recognize a statistical question as one that anticipates variability in the data related to the question and accounts for it in the answers. *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 one anticipates variability in students' ages.*
- Describing the nature of the attribute under investigation, including how it was measured and its units of measurement.

3

- 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.