

# 6<sup>th</sup> Grade Mathematics

## Poudre School District

### Pacing Overview

#### Chapter 1: Numerical Expressions and Factors

19 Days

6.NS.B.2\*, 6.NS.B.4, 6.EE.A.1\*, 6.EE.A.2b

#### Chapter 2: Fractions and Decimals

20 Days

6.NS.A.1\*, 6.NS.B.3\*

#### Chapter 3: Algebraic Expressions and Properties

13 Days

6.NS.B.4\*, 6.EE.A.2a\*, 6.EE.A.2c, 6.EE.A.3\*, 6.EE.A.4\*

#### Chapter 4: Areas of Polygons

10 Days

6.G.A.1\*, 6.G.A.3\*

#### Chapter 5: Ratios and Rates

29 Days

6.RP.A.1\*, 6.RP.A.2\*, 6.RP.A.3a, 6.RP.A.3b, 6.RP.A.3c, 6.RP.A.3d\*

#### Chapter 6: Integers and the Coordinate Plane

15 Days

6.NS.C.5\*, 6.NS.C.6a, 6.NS.C.6b, 6.NS.C.6c\*,  
6.NS.C.7a, 6.NS.C.7b, 6.NS.C.7c, 6.NS.C.7d\*, 6.NS.C.8\*

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### Chapter 7: Equations and Inequalities

24 Days

6.EE.B.5\*, 6.EE.B.6\*, 6.EE.B.7\*, 6.EE.B.8\*, 6.EE.C.9\*

### Chapter 8: Surface Area and Volume

14 Days

6.G.A.2\*, 6.G.A.4\*

### Chapter 9: Statistical Measures

10 Days

6.SP.A.1\*, 6.SP.A.2, 6.SP.A.3\*, 6.SP.A.4, 6.SP.B.5a, 6.SP.B.5c

### Chapter 10: Data Displays

10 Days

6.SP.A.2\*, 6.SP.B.4\*, 6.SP.B.5c\*, 6.SP.B.5d

\* Teaching is complete. Standard can be assessed.



Major Work of the Grade.

Supporting Work of the Grade.

Additional Work of the Grade.

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## Poudre School District

### Chapter 1: Numerical Expressions and Factors

19 Days

6.NS.B.2\*, 6.NS.B.4, 6.EE.A.1\*, 6.EE.A.2b

#### Chapter Summary

Section	Title	Level of Learning	Standard(s)	Pacing (every day)
	Chapter Opener			1 day
1.1	Activity 1.1			
1.1	Whole Number Operations	Learning	6.NS.B.2*	2 days
1.2	Activity 1.2			1 day
1.2	Powers and Exponents	Preparing for	6.EE.A.1	
1.3	Activity 1.3			1 day
1.3	Order of Operations	Learning	6.EE.A.1*	2 days
1.4	Activity 1.4			1 day
1.4	Prime Factorization	Preparing for	6.NS.B.4	1 day
1.5	Activity 1.5			1 day
1.5	Greatest Common Factor	Learning	6.NS.B.4, 6.EE.A.2b	1 day
1.6	Activity 1.6			1 day
1.6	Least Common Multiple	Learning	6.NS.B.4	1 day
	Extension 1.6			1 day

Total: 14 days

*Note: Additional days reserved for review and assessment.*

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### Poudre School District

Additional Activities/Resources	
Name	Location

Vocabulary		
base (of a power)	common factors	common multiples
evaluate (a numerical expression)	exponent	factor pair
factor tree	greatest common factor (GCF)	least common denominator (LCD)
least common multiple (LCM)	numerical expression	order of operations
perfect square	power	prime factorization
Venn diagram		

Standards	
<b>6.NS.B.2*</b>	Fluently divide multi-digit numbers using the standard algorithm.
<b>6.NS.B.4</b>	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. <i>For example, express <math>36 + 8</math> as <math>4(9 + 2)</math>.</i>
<b>6.EE.A.1*</b>	Write and evaluate numerical expressions involving whole-number exponents.
<b>6.EE.A.2b</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. <i>For example, describe the expression <math>2(8 + 7)</math> as a product of two factors; view <math>(8 + 7)</math> as both a single entity and a sum of two terms.</i>

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### Chapter 2: Fractions and Decimals

20 Days

6.NS.A.1\*, 6.NS.B.3\*

#### Chapter Summary

Section	Title	Level of Learning	Standard(s)	Pacing (every day)
	Chapter Opener			1 day
2.1	Activity 2.1			
2.1	Multiplying Fractions	Preparing for	6.NS.A.1	2 days
2.2	Activity 2.2			1 day
2.2	Dividing Fractions	Learning	6.NS.A.1	2 days
2.3	Activity 2.3			1 day
2.3	Dividing Mixed Numbers	Learning	6.NS.A.1*	1 day
2.4	Activity 2.4			1 day
2.4	Adding and Subtracting Decimals	Learning	6.NS.B.3	1 day
2.5	Activity 2.5			1 day
2.5	Multiplying Decimals	Learning	6.NS.B.3	2 days
2.6	Activity 2.6			1 day
2.6	Dividing Decimals	Learning	6.NS.B.3*	3 days

Total: 17 days

*Note: Additional days reserved for review and assessment.*

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Additional Activities/Resources	
Name	Location

Vocabulary	
multiplicative inverse property	reciprocals

Standards	
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. <i>For example, create a story context for <math>(2/3) \div (3/4)</math> and use a visual fraction model to show the quotient; use the relationship between multiplication and division to explain that <math>(2/3) \div (3/4) = 8/9</math> because <math>3/4</math> of <math>8/9</math> is <math>2/3</math>. (In general, <math>(a/b) \div (c/d) = ad/bc</math>.) How much chocolate will each person get if 3 people share <math>1/2</math> lb of chocolate equally? How many <math>3/4</math>-cup servings are in <math>2/3</math> of a cup of yogurt? How wide is a rectangular strip of land with length <math>3/4</math> mi and area <math>1/2</math> square mi?</i>
6.NS.B.3*	Fluently add, subtract, multiply, and divide multi-digit decimals using the standard algorithm for each operation.

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### Chapter 3: Algebraic Expressions and Properties

13 Days

**6.NS.B.4\***, 6.EE.A.2a\*, 6.EE.A.2c, 6.EE.A.3\*, 6.EE.A.4\*

### Chapter Summary

Section	Title	Level of Learning	Standard(s)	Pacing (every day)
	Chapter Opener			1 day
3.1	Activity 3.1			
	Algebraic Expressions	Learning	6.EE.A.2c	1 day
3.2	Activity 3.2			1 day
	Writing Expressions	Learning	6.EE.A.2a*	1 day
3.3	Activity 3.3			1 day
	Properties of Addition and Multiplication	Learning	6.EE.A.3, 6.EE.A.4	1 day
3.4	Activity 3.4			1 day
	The Distributive Property	Learning	6.NS.B.4*, 6.EE.A.3*, 6.EE.A.4*	2 days
	Extension 3.4			1 day

Total: 10 days

*Note: Additional days reserved for review and assessment.*

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Additional Activities/Resources	
Name	Location
Properties of Addition	Big Ideas Math Intervention: Number and Operations

Vocabulary		
addition property of zero	algebraic expression	associative properties of addition and multiplication
coefficient	commutative properties of addition and multiplication	constant
distributive property	equivalent expressions	factoring an expression
like terms	multiplication properties of zero and one	terms (of an algebraic expression)
variable		

Standards	
<b>6.NS.B.4*</b>	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. <i>For example, express <math>36 + 8</math> as <math>4(9 + 2)</math>.</i>
<b>6.EE.A.2a*</b>	Write expressions that record operations with numbers and with letters standing for numbers. <i>For example, express the calculation "Subtract <math>y</math> from 5" as <math>5 - y</math>.</i>
<b>6.EE.A.2c</b>	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). <i>For example, use the formulas <math>V = s^3</math> and <math>A = 6s^2</math> to find the volume and surface area of a cube with sides of length <math>s = 1/2</math>.</i>
<b>6.EE.A.3*</b>	Apply the properties of operations to generate equivalent expressions. <i>For example, apply the distributive property to the expression <math>3(2 + x)</math> to produce the equivalent expression <math>6 + 3x</math>; apply the distributive property to the expression <math>24x + 18y</math> to produce the equivalent expression <math>6(4x + 3y)</math>; apply properties of operations to <math>y + y + y</math> to produce the equivalent expression <math>3y</math>.</i>
<b>6.EE.A.4*</b>	Identify when two expressions are equivalent (i.e., when the two expressions name the same number regardless of which value is substituted into them). <i>For example, the expressions <math>y + y + y</math> and <math>3y</math> are equivalent because they name the same number regardless of which number <math>y</math> stands for.</i>



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### Chapter 4: Areas of Polygons

10 Days

6.G.A.1\*, 6.G.A.3\*

#### Chapter Summary

Section	Title	Level of Learning	Standard(s)	Pacing (every day)
	Chapter Opener			1 day
4.1	Activity 4.1			
4.1	Areas of Parallelograms	Learning	6.G.A.1	1 day
4.2	Activity 4.2			1 day
4.2	Areas of Triangles	Learning	6.G.A.1	
4.3	Activity 4.3			1 day
4.3	Areas of Trapezoids	Learning	6.G.A.1*	
	Extension 4.3			1 day
4.4	Activity 4.4			1 day
4.4	Polygons in the Coordinate Plane	Learning	6.G.A.3*	1 day

Total: 7 days

*Note: Additional days reserved for review and assessment.*

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### Poudre School District

Additional Activities/Resources	
Name	Location
Shapes	Big Ideas Math Intervention: Geometry

Vocabulary	
composite figure	polygon

Standards	
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.
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.

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## Poudre School District

### Chapter 5: Ratios and Rates

29 Days

6.RP.A.1\*, 6.RP.A.2\*, 6.RP.A.3a, 6.RP.A.3b, 6.RP.A.3c, 6.RP.A.3d\*

#### Chapter Summary

Section	Title	Level of Learning	Standard(s)	Pacing (every day)
	Chapter Opener			1 day
5.1	Activity 5.1			
	Ratios	Learning	6.RP.A.1	1 day
5.2	Activity 5.2			3 days
	Ratio Tables	Learning	6.RP.A.1*, 6.RP.A.3a	1 day
5.3	Activity 5.3			1 day
	Rates	Learning	6.RP.A.2, 6.RP.A.3a, 6.RP.A.3b	4 days
5.4	Activity 5.4			1 day
	Comparing and Graphing Ratios	Learning	6.RP.A.2*, 6.RP.A.3a	3 days
<i>End Quarter 2</i>				
5.5	Activity 5.5			1 day
	Percents	Learning	6.RP.A.3c	1 day
5.6	Activity 5.6			2 days
	Solving Percent Problems	Learning	6.RP.A.3c	4 days
5.7	Activity 5.7			1 day
	Converting Measures	Learning	6.RP.A.3d*	1 day

Total: 25 days

*Note: Additional days reserved for review and assessment.*

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Additional Activities/Resources	
Name	Location

Vocabulary		
conversion factor	equivalent rates	equivalent ratios
metric system	percent	rate
ratio	ratio table	unit analysis
unit rate	U. S. customary system	

Standards	
<b>6.RP.A.1*</b>	Understand the concept of a ratio and use ratio language to describe a ratio relationship between two quantities. <i>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."</i>
<b>6.RP.A.2*</b>	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. <i>For example, "This recipe has a ratio of 3 cups of flour to 4 cups of sugar, so there is <math>3/4</math> cup of flour for each cup of sugar." "We paid \$75 for 15 hamburgers, which is a rate of \$5 per hamburger."</i>
<b>6.RP.A.3a</b>	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>6.RP.A.3b</b>	Solve unit rate problems including those involving unit pricing and constant speed. <i>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?</i>
<b>6.RP.A.3c</b>	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.
<b>6.RP.A.3d*</b>	Use ratio reasoning to convert measurement units; manipulate and transform units appropriately when multiplying or dividing quantities.

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## Poudre School District

### Chapter 6: Integers and the Coordinate Plane

15 Days

6.NS.C.5\*, 6.NS.C.6a, 6.NS.C.6b, 6.NS.C.6c\*,  
6.NS.C.7a, 6.NS.C.7b, 6.NS.C.7c, 6.NS.C.7d\*, 6.NS.C.8\*

<b>Chapter Summary</b>				
<b>Section</b>	<b>Title</b>	<b>Level of Learning</b>	<b>Standard(s)</b>	<b>Pacing (every day)</b>
	Chapter Opener			1 day
6.1	Activity 6.1			
	Integers	Learning	6.NS.C.5, 6.NS.C.6a, 6.NS.C.6c	1 day
6.2	Activity 6.2			1 day
	Comparing and Ordering Integers	Learning	6.NS.C.6c, 6.NS.C.7a, 6.NS.C.7b	1 day
6.3	Activity 6.3			1 day
	Fractions and Decimals on the Number Line	Learning	6.NS.C.5*, 6.NS.C.6a, 6.NS.C.6c, 6.NS.C.7a, 6.NS.C.7b	1 day
6.4	Activity 6.4			1 day
	Absolute Value	Learning	6.NS.C.7c, 6.NS.C.7d*	1 day
6.5	Activity 6.5			1 day
	The Coordinate Plane	Learning	6.NS.C.6b, 6.NS.C.6c*, 6.NS.C.8*	2 days
	Extension 6.5			1 day

Total: 12 days

*Note: Additional days reserved for review and assessment.*

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## Poudre School District

Additional Activities/Resources	
Name	Location

Vocabulary		
absolute value	coordinate plane	integers
negative numbers	opposites	origin
positive numbers	quadrants	

Standards	
<b>6.NS.C.5*</b>	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.
<b>6.NS.C.6a</b>	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>6.NS.C.6b</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.
<b>6.NS.C.6c*</b>	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.
<b>6.NS.C.7a</b>	Interpret statements of inequality as statements about the relative position of two numbers on a number line diagram. <i>For example, interpret <math>-3 &gt; -7</math> as a statement that -3 is located to the right of -7 on a number line oriented from left to right.</i>
<b>6.NS.C.7b</b>	Write, interpret, and explain statements of order for rational numbers in real-world contexts. <i>For example, write <math>-3^{\circ}\text{C} &gt; -7^{\circ}\text{C}</math> to express the fact that <math>-3^{\circ}\text{C}</math> is warmer than <math>-7^{\circ}\text{C}</math>.</i>
<b>6.NS.C.7c</b>	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. <i>For example, for an account balance of -30 dollars, write <math> -30  = 30</math> to describe the size of the debt in dollars.</i>
<b>6.NS.C.7d*</b>	Distinguish comparisons of absolute value from statements about order. <i>For example, recognize that an account balance less than -30 dollars represents a debt greater than 30 dollars.</i>
<b>6.NS.C.8*</b>	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.

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## Poudre School District

### Chapter 7: Equations and Inequalities

24 Days

6.EE.B.5\*, 6.EE.B.6\*, 6.EE.B.7\*, 6.EE.B.8\*, 6.EE.C.9\*

#### Chapter Summary

Section	Title	Level of Learning	Standard(s)	Pacing (every day)
	Chapter Opener			1 day
7.1	Activity 7.1			1 day
	Writing Equations in one Variable	Learning	6.EE.B.6*	1 day
7.2	Activity 7.2			1 day
	Solving Equations Using Addition or Subtraction	Learning	6.EE.B.5, 6.EE.B.7	2 days
7.3	Activity 7.3			1 day
	Solving Equations Using Multiplication or Division	Learning	6.EE.B.5, 6.EE.B.7*	2 days
<i>Quarter 3 Ends / Spring Break</i>				
7.4	Activity 7.4			1 day
	Writing Equations in Two Variables	Learning	6.EE.C.9*	3 days
7.5	Activity 7.5			1 day
	Writing and Graphing Inequalities	Learning	6.EE.B.5, 6.EE.B.8	1 day
7.6	Activity 7.6			2 days
	Solving Inequalities Using Additional or Subtraction	Applying	6.EE.B.5, 6.EE.B.8	1 day
7.7	Activity 7.7			1 day
	Solving Inequalities Using Multiplication or Division	Applying	6.EE.B.5*, 6.EE.B.8*	2 days

Total: 20 days

*Note: Additional days reserved for review and assessment.*

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<b>Additional Activities/Resources</b>	
<b>Name</b>	<b>Location</b>
Tile Activities 6 and 7	Big Ideas Math Intervention: Numbers and Operations

<b>Vocabulary</b>		
addition property of equality	addition property of inequality	dependent variable
division property of equality	division property of inequality	equation
equation in two variables	graph of an inequality	independent variable
inequality	inverse operations	multiplication property of equality
multiplication property of inequality	multiplicative inverse property	Solution (of an equation)
solution of an equation in two variables	solution of an inequality	solution set
subtraction property of equality	subtraction property of inequality	

<b>Standards</b>	
<b>6.EE.B.5*</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.
<b>6.EE.B.6*</b>	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.
<b>6.EE.B.7*</b>	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.
<b>6.EE.B.8*</b>	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.
<b>6.EE.C.9*</b>	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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## Poudre School District

### Chapter 8: Surface Area and Volume

14 Days

6.G.A.2\*, 6.G.A.4\*

#### Chapter Summary

Section	Title	Level of Learning	Standard(s)	Pacing (every day)
	Chapter Opener			1 day
8.1	Activity 8.1			
	Three-Dimensional Figures	Learning	6.G.A.4	1 day
8.2	Activity 8.2			1 day
	Surface Area of Prisms	Learning	6.G.A.4	2 days
8.3	Activity 8.3			1 day
	Surface Areas of Pyramids	Learning	6.G.A.4*	1 day
8.4	Activity 8.4			1 day
	Volumes of Rectangular Prisms	Learning	6.G.A.2*	1 day

Total: 9 days

*Note: Additional days reserved for review and assessment.*

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#### Additional Activities/Resources

Name	Location

#### Vocabulary

edge	face	net
polyhedron	prism	pyramid
solid	surface area	vertex (of a solid)
volume		

#### Standards

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 $V = lwh$ 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.A.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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### Chapter 9: Statistical Measures

10 Days

6.SP.A.1\*, 6.SP.A.2, 6.SP.A.3\*, 6.SP.A.4, 6.SP.B.5a, 6.SP.B.5c

#### Chapter Summary

Section	Title	Level of Learning	Standard(s)	Pacing (every day)
	Chapter Opener			1 day
9.1	Activity 9.1			
9.1	Introduction to Statistics	Learning	6.SP.A.1*, 6.SP.A.4	1 day
9.2	Activity 9.2			1 day
9.2	Mean	Learning	6.SP.A.2, 6.SP.A.3, 6.SP.B.5a, 6.SP.B.5c	
9.3	Activity 9.3			1 day
9.3	Measures of Center	Learning	6.SP.A.2, 6.SP.A.3, 6.SP.B.5c	
9.4	Activity 9.4			0.5 day
9.4	Measures of Variation	Learning	6.SP.A.2, 6.SP.A.3, 6.SP.B.5c	1 day
9.5	Activity 9.5			1 day
9.5	Mean Absolute Deviation	Learning	6.SP.A.2, 6.SP.A.3*, 6.SP.B.5c	

Total: 6.5 days

*Note: Additional days reserved for review and assessment.*

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<b>Additional Activities/Resources</b>	
<b>Name</b>	<b>Location</b>
M&M's® Activity	Big Ideas Math Intervention: Data Analysis

<b>Vocabulary</b>		
first quartiles ( $Q_1$ )	interquartile range	mean
mean absolute deviation	measure of center	measure of variation
median	mode	outlier
quartiles	range (of a data set)	statistical question
statistics	third quartiles ( $Q_3$ )	

<b>Standards</b>	
<b>6.SP.A.1*</b>	Recognize a statistical question as one that anticipates variability in the data related to the question and accounts for it in the answers. <i>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.</i>
<b>6.SP.A.2</b>	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.
<b>6.SP.A.3*</b>	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.
<b>6.SP.A.4</b>	Display numerical data in plots on a number line, including dot plots, histograms, and box plots.
<b>6.SP.B.5a</b>	Reporting the number of observations.
<b>6.SP.B.5c</b>	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<sup>th</sup> Grade Mathematics

## Poudre School District

### Chapter 10: Data Displays

10 Days

6.SP.A.2\*, 6.SP.B.4\*, 6.SP.B.5c\*, 6.SP.B.5d

#### Chapter Summary

Section	Title	Level of Learning	Standard(s)	Pacing (every day)
	Chapter Opener			1 day
10.1	Activity 10.1			
	Stem-and-Leaf Plots	Applying	6.SP.B.4	1 day
10.2	Activity 10.2			1 day
	Histograms	Learning	6.SP.A.2, 6.SP.B.4	
10.3	Shapes of Distributions	Learning	6.SP.A.2, 6.SP.B.4, 6.SP.B.5d	1 day
	Extension 10.3			1 day
	Activity 10.4			1 day
10.4	Box-and-Whisker Plots	Learning	6.SP.A.2*, 6.SP.B.4*, 6.SP.B.5c*	1 day

Total: 7 days

*Note: Additional days reserved for review and assessment.*

## 6<sup>th</sup> Grade Mathematics Poudre School District

<b>Additional Activities/Resources</b>	
<b>Name</b>	<b>Location</b>

<b>Vocabulary</b>		
box-and-whisker plot	five-number summary	frequency
frequency table	histogram	leaf
skewed left	skewed right	stem
stem-and-leaf plot	symmetric (distribution)	

<b>Standards</b>	
<b>6.SP.A.2*</b>	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.
<b>6.SP.B.4*</b>	Display numerical data in plots on a number line, including dot plots, histograms, and box plots.
<b>6.SP.B.5c*</b>	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.
<b>6.SP.B.5d</b>	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.