



# UNIT OVERVIEW

**Academic Year:** 2014-2015  
**Site:** Stork Elementary  
**Course Plan:** 6th Grade Math  
**Unit(s):** 1-10

## Unit 1

**Content Cluster:** Compute fluently with multi-digit numbers and find common factors and multiples. **Domain:** The Number System

UNIT STANDARDS & OBJECTIVES	COMPONENTS		
	1	2	3
<b>6.NS.2</b> ✓ Fluently divide multi-digit numbers using the standard algorithm.			
<ul style="list-style-type: none"> <li>† <b>Obj. 1</b> Students will compute fluently with multi-digit numbers by dividing with four-digit dividends and two-digit divisors, using the standard algorithm.</li> </ul>	X		
<ul style="list-style-type: none"> <li>† <b>Obj. 2</b> Students will compute fluently with multi-digit numbers by dividing multi-digit numbers, using the standard algorithm.</li> </ul>	X		
<b>Mathematical Practice Standards</b>			
<ul style="list-style-type: none"> <li>MPS6: Attend to precision.</li> </ul>			
<b>6.NS.3</b> ✓ Fluently add, subtract, multiply, and divide multi-digit decimals using the standard algorithm for each operation.			
<ul style="list-style-type: none"> <li>† <b>Obj. 1</b> Students will compute fluently with multi-digit numbers by adding multi-digit decimals, using the standard algorithm.</li> </ul>		X	
<ul style="list-style-type: none"> <li>† <b>Obj. 2</b> Students will compute fluently with multi-digit numbers by subtracting multi-digit decimals, using the standard algorithm.</li> </ul>		X	
<ul style="list-style-type: none"> <li>† <b>Obj. 3</b> Students will compute fluently with multi-digit numbers by multiplying multi-digit decimals, using the standard algorithm.</li> </ul>		X	
<ul style="list-style-type: none"> <li>† <b>Obj. 4</b> Students will compute fluently with multi-digit numbers by dividing multi-digit decimals, using the standard algorithm.</li> </ul>		X	
<b>Mathematical Practice Standards</b>			
<ul style="list-style-type: none"> <li>MPS6: Attend to precision.</li> </ul>			
<b>6.NS.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>			
<ul style="list-style-type: none"> <li>† <b>Obj. 1</b> Students will find common factors and multiples by finding the greatest common factor of two whole numbers less than or equal to 100.</li> </ul>			X
<ul style="list-style-type: none"> <li>† <b>Obj. 2</b> Students will find common factors and multiples by finding the least common multiple of two whole numbers less than or equal to 12.</li> </ul>			X

† Added by Course Planner



# UNIT OVERVIEW

UNIT STANDARDS & OBJECTIVES	COMPONENTS		
	1	2	3
<ul style="list-style-type: none"> <li>† <b>Obj. 3</b> Students will compute fluently with multi-digit numbers and find common factors and multiples by expressing 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, using the distributive property.</li> </ul>			<b>X</b>
<b>Mathematical Practice Standards</b> <ul style="list-style-type: none"> <li>MPS6: Attend to precision.</li> <li>MPS8: Look for and express regularity in repeated reasoning.</li> </ul>			
<b>UNIT BIG IDEA/ESSENTIAL QUESTION</b>			
None entered.			
<b>UNIT PERFORMANCE TASKS</b>			
None entered.			
<b>UNIT RESOURCES</b>			
<b>Textbooks</b> <ul style="list-style-type: none"> <li>†MMH California Mathematics Concepts, Skills, and Problem Solving - Sixth Grade               <ul style="list-style-type: none"> <li>†Chapter 1 Resource Book</li> <li>†Lesson 1-8</li> <li>†Lesson 4-8</li> <li>†Lesson 4-2</li> <li>†Lesson 4-1</li> <li>†Lesson 4-5</li> <li>†Prerequisite Skills</li> <li>†Chapter 4 Resource Book</li> <li>†Lesson 4-4</li> </ul> </li> </ul>			
<b>Other Texts</b> <ul style="list-style-type: none"> <li>†Ready Common Core-Math 6th Grade</li> <li>†Standards Plus Common Core Edition</li> <li>†Teacher Works CD Math Skills Maintenance</li> <li>†Ready Common Core</li> </ul>			
<b>UNIT NOTES</b>			
None entered.			

† Added by Course Planner



# UNIT OVERVIEW

## Unit 2

**Content Cluster:** Apply and extend previous understandings of multiplication and division to divide fractions by fractions. **Domain:** The Number System

UNIT STANDARDS & OBJECTIVES	COMPONENTS
	1
<p><b>6.NS.1</b> ✓ 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></p>	
<ul style="list-style-type: none"> <li>† <b>Obj. 1</b> Students will apply and extend previous understandings of multiplication and division to divide fractions by fractions by creating a story context for a given problem involving interpreting quotients of fractions and using visual fraction models to represent the problem.</li> </ul>	<b>X</b>
<ul style="list-style-type: none"> <li>† <b>Obj. 2</b> Students will apply and extend previous understandings of multiplication and division to divide fractions by fractions by creating a story context for a given problem involving interpreting quotients of fractions and using equations to represent the problem.</li> </ul>	<b>X</b>
<ul style="list-style-type: none"> <li>† <b>Obj. 3</b> Students will apply and extend previous understandings of multiplication and division to divide fractions by fractions by computing quotients of fractions, using equations to represent the problem and the relationship between multiplication and division to explain the quotient.</li> </ul>	<b>X</b>
<ul style="list-style-type: none"> <li>† <b>Obj. 4</b> Students will apply and extend previous understandings of multiplication and division to divide fractions by fractions by solving word problems involving division of fractions by fractions, using visual fraction models to represent the problem.</li> </ul>	<b>X</b>
<ul style="list-style-type: none"> <li>† <b>Obj. 5</b> Students will apply and extend previous understandings of multiplication and division to divide fractions by fractions by solving word problems involving division of fractions by fractions, using equations to represent the problem and the relationship between multiplication and division to explain the quotient.</li> </ul>	<b>X</b>
<p><b>Mathematical Practice Standards</b></p> <ul style="list-style-type: none"> <li>MPS1: Make sense of problems and persevere in solving them.</li> <li>MPS2: Reason abstractly and quantitatively.</li> <li>MPS3: Construct viable arguments and critique the reasoning of others.</li> <li>MPS4: Model with mathematics.</li> </ul>	
<p><b>UNIT BIG IDEA/ESSENTIAL QUESTION</b></p> <p>None entered.</p>	
<p><b>UNIT PERFORMANCE TASKS</b></p> <p>None entered.</p>	

† Added by Course Planner



## UNIT OVERVIEW

UNIT RESOURCES
<b>Textbooks</b>
†MMH California Mathematics Concepts, Skills, and Problem Solving - Sixth Grade <ul style="list-style-type: none"><li>• †Lesson 5-6</li><li>• †Lesson 5-3</li><li>• †Lesson 5-7</li><li>• †Chapter 5-Mid Chapter Quiz</li><li>• †Lesson 5-5</li><li>• †Chapter 5 Resource Book</li><li>• †Lesson 5-2</li></ul>
<b>Other Texts</b>
†Ready Common Core †Ready Common Core-Math 6th Grade †Standards Plus Common Core Edition
UNIT NOTES
None entered.

† Added by Course Planner

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# UNIT OVERVIEW

## Unit 3

**Content Cluster:** Understand ratio concepts and use ratio reasoning to solve problems.

**Domain:** Ratios and Proportional Relationships

UNIT STANDARDS & OBJECTIVES	COMPONENTS					
	1	2	3	4	5	6
<p><b>6.RP.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></p>						
<ul style="list-style-type: none"> <li>† <b>Obj. 1</b> Students will understand ratio concepts and use ratio reasoning to solve problems by describing what a ratio is, using correct terminology.</li> </ul>	X					
<ul style="list-style-type: none"> <li>† <b>Obj. 2</b> Students will understand ratio concepts and use ratio reasoning to solve problems by using ratio language to describe a ratio relationship between two quantities.</li> </ul>	X					
<p><b>Mathematical Practice Standards</b></p> <ul style="list-style-type: none"> <li>MPS6: Attend to precision.</li> </ul>						
<p><b>6.RP.2</b> ✓ Understand the concept of a unit rate <math>a/b</math> associated with a ratio <math>a:b</math> with <math>b \neq 0</math>, 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.”<sup>1</sup></i></p> <p>1 Expectations for unit rates in this grade are limited to non-complex fractions.</p>						
<ul style="list-style-type: none"> <li>† <b>Obj. 1</b> Students will understand ratio concepts and use ratio reasoning to solve problems by explaining the concept of a unit rate <math>a/b</math> associated with a ratio <math>a:b</math> (with <math>b \neq 0</math>), using correct terminology.</li> </ul>		X				
<ul style="list-style-type: none"> <li>† <b>Obj. 2</b> Students will understand ratio concepts and use ratio reasoning to solve problems by using rate language in the context of a ratio relationship.</li> </ul>		X				
<p><b>Mathematical Practice Standards</b></p> <ul style="list-style-type: none"> <li>MPS6: Attend to precision.</li> </ul>						
<p><b>6.RP.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.</p>						
<ul style="list-style-type: none"> <li>† <b>Obj. 1</b> Students will understand ratio concepts and use ratio reasoning to solve problems by making tables of equivalent ratios relating quantities with whole number measurements.</li> </ul>			X			
<ul style="list-style-type: none"> <li>† <b>Obj. 2</b> Students will understand ratio concepts and use ratio reasoning to solve problems by finding missing values in tables of equivalent ratios relating quantities with whole number measurements.</li> </ul>			X			
<ul style="list-style-type: none"> <li>† <b>Obj. 3</b> Students will understand ratio concepts and use ratio reasoning to solve problems by plotting pairs of values from tables of equivalent ratios on the coordinate plane.</li> </ul>			X			
<ul style="list-style-type: none"> <li>† <b>Obj. 4</b> Students will understand ratio concepts and use ratio reasoning to solve problems by using tables of equivalent ratios to compare ratios.</li> </ul>			X			

† Added by Course Planner



# UNIT OVERVIEW

UNIT STANDARDS & OBJECTIVES	COMPONENTS					
	1	2	3	4	5	6
<b>Mathematical Practice Standards</b> <ul style="list-style-type: none"> <li>MPS6: Attend to precision.</li> <li>MPS7: Look for and make use of structure.</li> </ul>						
<b>6.RP.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>						
<ul style="list-style-type: none"> <li>† <b>Obj. 1</b> Students will understand ratio concepts and use ratio reasoning to solve problems by solving unit rate problems involving unit pricing, using tables of equivalent ratios.</li> </ul>				X		
<ul style="list-style-type: none"> <li>† <b>Obj. 2</b> Students will understand ratio concepts and use ratio reasoning to solve problems by solving unit rate problems involving unit pricing, using equations.</li> </ul>				X		
<ul style="list-style-type: none"> <li>† <b>Obj. 3</b> Students will understand ratio concepts and use ratio reasoning to solve problems by solving unit rate problems involving constant speed, using double number line diagrams.</li> </ul>				X		
<ul style="list-style-type: none"> <li>† <b>Obj. 4</b> Students will understand ratio concepts and use ratio reasoning to solve problems by solving unit rate problems involving constant speed, using equations.</li> </ul>				X		
<b>Mathematical Practice Standards</b> <ul style="list-style-type: none"> <li>MPS1: Make sense of problems and persevere in solving them.</li> <li>MPS2: Reason abstractly and quantitatively.</li> <li>MPS4: Model with mathematics.</li> </ul>						
<b>6.RP.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.						
<ul style="list-style-type: none"> <li>† <b>Obj. 1</b> Students will understand ratio concepts and use ratio reasoning to solve problems by finding a percent of a quantity as a rate per 100.</li> </ul>					X	
<ul style="list-style-type: none"> <li>† <b>Obj. 2</b> Students will understand ratio concepts and use ratio reasoning to solve problems by solving real-world problems involving finding the whole, given a part and the percent, using equations.</li> </ul>					X	
<ul style="list-style-type: none"> <li>† <b>Obj. 3</b> Students will understand ratio concepts and use ratio reasoning to solve problems by solving mathematical problems involving finding the whole, given a part and the percent, using equations.</li> </ul>					X	
<b>Mathematical Practice Standards</b> <ul style="list-style-type: none"> <li>MPS1: Make sense of problems and persevere in solving them.</li> <li>MPS2: Reason abstractly and quantitatively.</li> <li>MPS4: Model with mathematics.</li> </ul>						
<b>6.RP.3d</b> ✓ Use ratio reasoning to convert measurement units; manipulate and transform units appropriately when multiplying or dividing quantities.						
<ul style="list-style-type: none"> <li>† <b>Obj. 1</b> Students will understand ratio concepts and use ratio reasoning to solve problems by using ratio reasoning to convert measurement units, using tape diagrams.</li> </ul>						X
<ul style="list-style-type: none"> <li>† <b>Obj. 2</b> Students will understand ratio concepts and use ratio reasoning to solve problems by using ratio reasoning to convert measurement units, using double number line diagrams.</li> </ul>						X
<ul style="list-style-type: none"> <li>† <b>Obj. 3</b> Students will understand ratio concepts and use ratio reasoning to solve problems by manipulating</li> </ul>						

† Added by Course Planner



# UNIT OVERVIEW

UNIT STANDARDS & OBJECTIVES	COMPONENTS					
	1	2	3	4	5	6
and transforming units appropriately, multiplying each measurement in a ratio pair by the same positive number using tape diagrams.						X
<ul style="list-style-type: none"> <li>† Obj. 4 Students will understand ratio concepts and use ratio reasoning to solve problems by manipulating and transforming units appropriately, dividing each measurement in a ratio pair by the same positive number using tape diagrams.</li> </ul>						X
<b>Mathematical Practice Standards</b> <ul style="list-style-type: none"> <li>MPS6: Attend to precision.</li> </ul>						
<b>UNIT BIG IDEA/ESSENTIAL QUESTION</b>						
None entered.						
<b>UNIT PERFORMANCE TASKS</b>						
None entered.						
<b>UNIT RESOURCES</b>						
<b>Textbooks</b>						
†MMH California Mathematics Concepts, Skills, and Problem Solving - Sixth Grade <ul style="list-style-type: none"> <li>†Lesson 6-5</li> <li>†Chapter 4 Resource Book</li> <li>†Lesson 7-1</li> <li>†Chapter 6 Resource Book</li> <li>†Lesson 6-3</li> <li>†Lesson 4-6</li> <li>†Lesson 6-4</li> <li>†Lesson 6-2</li> <li>†Lesson 7-7</li> <li>†Lesson 4-7</li> <li>†Lesson 6-1</li> <li>†Lesson 7-6</li> <li>†Chapter 7 Resource Book</li> <li>†Lesson 7-2</li> </ul>						
<b>Other Texts</b>						
†Ready Common Core-Math 6th Grade †Standards Plus Common Core Edition						
<b>UNIT NOTES</b>						
None entered.						

† Added by Course Planner



# UNIT OVERVIEW

## Unit 4

**Content Cluster:** Apply and extend previous understandings of numbers to the system of rational numbers. **Domain:** The Number System

UNIT STANDARDS & OBJECTIVES	COMPONENTS								
	1	2	3	4	5	6	7	8	9
<p><b>6.NS.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.</p>									
<ul style="list-style-type: none"> <li>† <b>Obj. 1</b> Students will apply and extend previous understandings of numbers to the system of rational numbers by explaining how positive and negative numbers are used together to describe quantities having opposite directions or values.</li> </ul>	X								
<ul style="list-style-type: none"> <li>† <b>Obj. 2</b> Students will apply and extend previous understandings of numbers to the system of rational numbers by using positive and negative numbers to represent quantities in real-world contexts and explain the meaning of zero in each situation.</li> </ul>	X								
<p><b>Mathematical Practice Standards</b></p> <ul style="list-style-type: none"> <li>MPS2: Reason abstractly and quantitatively.</li> </ul>									
<p><b>6.NS.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., <math>-(-3) = 3</math>, and that 0 is its own opposite.</p>									
<ul style="list-style-type: none"> <li>† <b>Obj. 1</b> Students will apply and extend previous understandings of numbers to the system of rational numbers by explaining how opposite signs of numbers indicate locations on opposite sides of 0 on the number line.</li> </ul>		X							
<ul style="list-style-type: none"> <li>† <b>Obj. 2</b> Students will apply and extend previous understandings of numbers to the system of rational numbers by identifying the number that is the opposite of a number, as well as the opposite of the opposite of a number, including zero.</li> </ul>		X							
<p><b>Mathematical Practice Standards</b></p> <ul style="list-style-type: none"> <li>MPS6: Attend to precision.</li> </ul>									
<p><b>6.NS.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.</p>									
<ul style="list-style-type: none"> <li>† <b>Obj. 1</b> Students will apply and extend previous understandings of numbers to the system of rational numbers by representing points indicated by coordinates with signed numbers.</li> </ul>			X						
<ul style="list-style-type: none"> <li>† <b>Obj. 2</b> Students will apply and extend previous understandings of numbers to the system of rational numbers by explaining how signs of numbers in ordered pairs indicate locations in quadrants of the coordinate plane.</li> </ul>			X						
<ul style="list-style-type: none"> <li>† <b>Obj. 3</b> Students will apply and extend previous understandings of numbers to the system of rational numbers by explaining and giving examples of how, when two ordered pairs differ only by signs, the locations of the points are related by reflections across one or both axes.</li> </ul>			X						

† Added by Course Planner





# UNIT OVERVIEW

UNIT STANDARDS & OBJECTIVES	COMPONENTS								
	1	2	3	4	5	6	7	8	9
<b>Mathematical Practice Standards</b>									
<ul style="list-style-type: none"> <li>MPS6: Attend to precision.</li> </ul>									
<b>6.NS.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.									
<ul style="list-style-type: none"> <li>† <b>Obj. 1</b> Students will apply and extend previous understandings of numbers to the system of rational numbers by finding and positioning integers and other rational numbers on a horizontal number line diagram.</li> </ul>				X					
<ul style="list-style-type: none"> <li>† <b>Obj. 2</b> Students will apply and extend previous understandings of numbers to the system of rational numbers by finding and positioning integers and other rational numbers on a vertical number line diagram.</li> </ul>				X					
<ul style="list-style-type: none"> <li>† <b>Obj. 3</b> Students will apply and extend previous understandings of numbers to the system of rational numbers by finding and positioning pairs of integers on a coordinate plane.</li> </ul>				X					
<ul style="list-style-type: none"> <li>† <b>Obj. 4</b> Students will apply and extend previous understandings of numbers to the system of rational numbers by finding and positioning pairs of rational numbers (e.g., signed fractions and decimals) on a coordinate plane.</li> </ul>				X					
<b>Mathematical Practice Standards</b>									
<ul style="list-style-type: none"> <li>MPS2: Reason abstractly and quantitatively.</li> <li>MPS6: Attend to precision.</li> </ul>									
<b>6.NS.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 <math>-3</math> is located to the right of <math>-7</math> on a number line oriented from left to right.</i>									
<ul style="list-style-type: none"> <li>† <b>Obj. 1</b> Students will apply and extend previous understandings of numbers to the system of rational numbers by interpreting expressions of inequality as statements about the relative position of two numbers on a number line diagram.</li> </ul>					X				
<b>Mathematical Practice Standards</b>									
<ul style="list-style-type: none"> <li>MPS6: Attend to precision.</li> </ul>									
<b>6.NS.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>									
<ul style="list-style-type: none"> <li>† <b>Obj. 1</b> Students will apply and extend previous understandings of numbers to the system of rational numbers by interpreting and explaining statements of order for rational numbers in real-world contexts.</li> </ul>						X			
<ul style="list-style-type: none"> <li>† <b>Obj. 2</b> Students will apply and extend previous understandings of numbers to the system of rational numbers by writing statements of order for rational numbers in real-world contexts.</li> </ul>						X			
<b>Mathematical Practice Standards</b>									
<ul style="list-style-type: none"> <li>MPS2: Reason abstractly and quantitatively.</li> </ul>									
<b>6.NS.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 <math>-30</math> dollars, write <math> -30  = 30</math> to describe the size of the debt in dollars.</i>									
<ul style="list-style-type: none"> <li>† <b>Obj. 1</b> Students will apply and extend previous understandings of numbers to the system of</li> </ul>									

† Added by Course Planner



## UNIT OVERVIEW

UNIT STANDARDS & OBJECTIVES	COMPONENTS								
	1	2	3	4	5	6	7	8	9
rational numbers by explaining the absolute value of a rational number as its distance from 0 on the number line.							X		
• † Obj. 2 Students will apply and extend previous understandings of numbers to the system of rational numbers by describing and writing absolute value as magnitude for a positive or negative quantity in a real-world situation.							X		
<b>Mathematical Practice Standards</b>									
<ul style="list-style-type: none"> <li>MPS2: Reason abstractly and quantitatively.</li> <li>MPS6: Attend to precision.</li> </ul>									
<b>6.NS.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>									
• † Obj. 1 Students will apply and extend previous understandings of numbers to the system of rational numbers by distinguishing comparisons of absolute value from statements about order.								X	
<b>Mathematical Practice Standards</b>									
<ul style="list-style-type: none"> <li>MPS2: Reason abstractly and quantitatively.</li> <li>MPS6: Attend to precision.</li> </ul>									
<b>6.NS.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.									
• † Obj. 1 Students will apply and extend previous understandings of numbers to the system of rational numbers by graphing points in all four quadrants of the coordinate plane to solve real-world problems.									X
• † Obj. 2 Students will apply and extend previous understandings of numbers to the system of rational numbers by graphing points in all four quadrants of the coordinate plane to solve mathematical problems.									X
• † Obj. 3 Students will apply and extend previous understandings of numbers to the system of rational numbers by using absolute value to calculate the distance between two points with the same first or second coordinate to solve real-world problems.									X
• † Obj. 4 Students will apply and extend previous understandings of numbers to the system of rational numbers by using absolute value to calculate the distance between two points with the same first or second coordinate to solve mathematical problems.									X
<b>Mathematical Practice Standards</b>									
<ul style="list-style-type: none"> <li>MPS4: Model with mathematics.</li> <li>MPS6: Attend to precision.</li> </ul>									
<b>UNIT BIG IDEA/ESSENTIAL QUESTION</b>									
None entered.									
<b>UNIT PERFORMANCE TASKS</b>									
None entered.									

† Added by Course Planner



## UNIT OVERVIEW

UNIT RESOURCES
<b>Textbooks</b>
†MMH California Mathematics Concepts, Skills, and Problem Solving - Sixth Grade <ul style="list-style-type: none"><li>• †Lesson 2-2</li><li>• †Lesson 2-3</li><li>• †Lesson 2-1</li><li>• †Chapter 2 Resource Book</li><li>• †Lesson 4-9</li><li>• †Chapter 4 Resource Book</li></ul>
<b>Other Texts</b>
†Ready Common Core-Math 6th Grade †RCC Practice Tests #1-3 †Standards Plus Common Core Edition †Ready Common Core
UNIT NOTES
None entered.

† Added by Course Planner

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# UNIT OVERVIEW

## Unit 5

**Content Cluster:** Apply and extend previous understandings of arithmetic to algebraic expressions.

**Domain:** Expressions and Equations

UNIT STANDARDS & OBJECTIVES	COMPONENTS					
	1	2	3	4	5	6
<b>6.EE.1</b> ✓ Write and evaluate numerical expressions involving whole-number exponents.						
<ul style="list-style-type: none"> <li>† <b>Obj. 1</b> Students will apply and extend previous understandings of arithmetic to algebraic expressions by evaluating numerical expressions involving whole-number exponents.</li> </ul>	X					
<ul style="list-style-type: none"> <li>† <b>Obj. 2</b> Students will apply and extend previous understandings of arithmetic to algebraic expressions by writing numerical expressions involving whole-number exponents.</li> </ul>	X					
<b>Mathematical Practice Standards</b>						
<ul style="list-style-type: none"> <li>MPS2: Reason abstractly and quantitatively.</li> <li>MPS6: Attend to precision.</li> </ul>						
<b>6.EE.2a</b> ✓ Write expressions that record operations with numbers and with letters standing for numbers. <i>For example, express the calculation “Subtract y from 5” as <math>5 - y</math>.</i>						
<ul style="list-style-type: none"> <li>† <b>Obj. 1</b> Students will apply and extend previous understandings of arithmetic to algebraic expressions by writing expressions that record the operations of addition and subtraction with numbers and with letters standing for unknown numbers.</li> </ul>		X				
<ul style="list-style-type: none"> <li>† <b>Obj. 2</b> Students will apply and extend previous understandings of arithmetic to algebraic expressions by writing expressions that record the operations of multiplication and division with numbers and with letters standing for unknown numbers.</li> </ul>		X				
<ul style="list-style-type: none"> <li>† <b>Obj. 3</b> Students will apply and extend previous understandings of arithmetic to algebraic expressions by writing expressions that record the operations of addition or subtraction and multiplication or division with numbers and letters standing for unknown numbers.</li> </ul>		X				
<b>Mathematical Practice Standards</b>						
<ul style="list-style-type: none"> <li>MPS6: Attend to precision.</li> </ul>						
<b>6.EE.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>						
<ul style="list-style-type: none"> <li>† <b>Obj. 1</b> Students will apply and extend previous understandings of arithmetic to algebraic expressions by identifying parts of an expression, using correct mathematical terms.</li> </ul>			X			
<ul style="list-style-type: none"> <li>† <b>Obj. 2</b> Students will apply and extend previous understandings of arithmetic to algebraic expressions by describing one or more parts of an expression as a single entity, using correct mathematical terms.</li> </ul>			X			
<b>Mathematical Practice Standards</b>						
<ul style="list-style-type: none"> <li>MPS7: Look for and make use of structure.</li> </ul>						
<b>6.EE.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</i>						

† Added by Course Planner



# UNIT OVERVIEW

UNIT STANDARDS & OBJECTIVES	COMPONENTS					
	1	2	3	4	5	6
<i>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>						
<ul style="list-style-type: none"> <li>† <b>Obj. 1</b> Students will apply and extend previous understandings of arithmetic to algebraic expressions by evaluating expressions that arise from formulas used in real-world problems at specific values of their variables.</li> </ul>				X		
<ul style="list-style-type: none"> <li>† <b>Obj. 2</b> Students will apply and extend previous understandings of arithmetic to algebraic expressions by performing 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).</li> </ul>				X		
<b>Mathematical Practice Standards</b>						
<ul style="list-style-type: none"> <li>MPS2: Reason abstractly and quantitatively.</li> <li>MPS6: Attend to precision.</li> </ul>						
<b>6.EE.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>						
<ul style="list-style-type: none"> <li>† <b>Obj. 1</b> Students will apply and extend previous understandings of arithmetic to algebraic expressions by applying the associative property to generate equivalent expressions.</li> </ul>					X	
<ul style="list-style-type: none"> <li>† <b>Obj. 2</b> Students will apply and extend previous understandings of arithmetic to algebraic expressions by applying the commutative property to generate equivalent expressions.</li> </ul>					X	
<ul style="list-style-type: none"> <li>† <b>Obj. 3</b> Students will apply and extend previous understandings of arithmetic to algebraic expressions by applying the distributive property to generate equivalent expressions.</li> </ul>					X	
<b>Mathematical Practice Standards</b>						
<ul style="list-style-type: none"> <li>MPS7: Look for and make use of structure.</li> <li>MPS8: Look for and express regularity in repeated reasoning.</li> </ul>						
<b>6.EE.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>						
<ul style="list-style-type: none"> <li>† <b>Obj. 1</b> Students will apply and extend previous understandings of arithmetic to algebraic expressions by identifying when two expressions using the same variable are equivalent.</li> </ul>						X
<b>Mathematical Practice Standards</b>						
<ul style="list-style-type: none"> <li>MPS7: Look for and make use of structure.</li> </ul>						
<b>UNIT BIG IDEA/ESSENTIAL QUESTION</b>						
None entered.						
<b>UNIT PERFORMANCE TASKS</b>						
None entered.						

† Added by Course Planner



## UNIT OVERVIEW

<b>UNIT RESOURCES</b>
<b>Textbooks</b>
†MMH California Mathematics Concepts, Skills, and Problem Solving - Sixth Grade <ul style="list-style-type: none"><li>• †Lesson 1-2, 1-4, 1-6, 1-7, 1-8, 1-9, 1-10, 3-1, 3-6, 10-8</li></ul>
<b>Other Texts</b>
†Ready Common Core-Math 6th Grade †Standards Plus Common Core Edition
<b>UNIT NOTES</b>
None entered.

† Added by Course Planner

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# UNIT OVERVIEW

## Unit 6

**Content Cluster:** Reason about and solve one-variable equations and inequalities.

**Domain:** Expressions and Equations

UNIT STANDARDS & OBJECTIVES	COMPONENTS			
	1	2	3	4
<b>6.EE.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.				
<ul style="list-style-type: none"> <li>† <b>Obj. 1</b> Students will reason about and solve one-variable equations by explaining how solving an equation is a process of answering the question: "Which values from a specified set, if any, can make the equation true?"</li> </ul>	X			
<ul style="list-style-type: none"> <li>† <b>Obj. 2</b> Students will reason about and solve one-variable inequalities by explaining how solving an inequality is a process of answering the question: "Which values from a specified set, if any, can make the inequality true?"</li> </ul>	X			
<ul style="list-style-type: none"> <li>† <b>Obj. 3</b> Students will reason about and solve one-variable equations by using substitution to determine whether a given number in a specified set makes an equation true.</li> </ul>	X			
<ul style="list-style-type: none"> <li>† <b>Obj. 4</b> Students will reason about and solve one-variable inequalities by using substitution to determine whether a given number in a specified set makes an inequality true.</li> </ul>	X			
<b>Mathematical Practice Standards</b> <ul style="list-style-type: none"> <li>MPS3: Construct viable arguments and critique the reasoning of others.</li> <li>MPS6: Attend to precision.</li> </ul>				
<b>6.EE.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.				
<ul style="list-style-type: none"> <li>† <b>Obj. 1</b> Students will reason about and solve one-variable equations and inequalities by writing expressions using variables to represent numbers when solving a real-world problem.</li> </ul>		X		
<ul style="list-style-type: none"> <li>† <b>Obj. 2</b> Students will reason about and solve one-variable equations and inequalities by writing expressions using variables to represent numbers when solving a mathematical problem.</li> </ul>		X		
<ul style="list-style-type: none"> <li>† <b>Obj. 3</b> Students will reason about and solve one-variable equations and inequalities by explaining how a variable can represent an unknown number or, depending on the purpose at hand, any number in a specified set (i.e., a number that "varies").</li> </ul>		X		
<b>Mathematical Practice Standards</b> <ul style="list-style-type: none"> <li>MPS2: Reason abstractly and quantitatively.</li> </ul>				
<b>6.EE.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.				
<ul style="list-style-type: none"> <li>† <b>Obj. 1</b> Students will reason about and solve one-variable equations by writing and solving equations of the form <math>x + p = q</math>, representing real-world problems (for cases in which <math>p</math>, <math>q</math>, and <math>x</math> are all non-negative rational numbers).</li> </ul>			X	
<ul style="list-style-type: none"> <li>† <b>Obj. 2</b> Students will reason about and solve one-variable equations by writing and solving equations of the</li> </ul>				

† Added by Course Planner

UNIT STANDARDS & OBJECTIVES	COMPONENTS			
	1	2	3	4
form $x + p = q$ , representing mathematical problems (for cases in which $p$ , $q$ , and $x$ are all non-negative rational numbers).			X	
<ul style="list-style-type: none"> <li>† Obj. 3 Students will reason about and solve one-variable equations by writing and solving equations of the form <math>px = q</math>, representing real-world problems (for cases in which <math>p</math>, <math>q</math>, and <math>x</math> are all nonnegative rational numbers).</li> </ul>			X	
<ul style="list-style-type: none"> <li>† Obj. 4 Students will reason about and solve one-variable equations by writing and solving equations of the form <math>px = q</math>, representing mathematical problems (for cases in which <math>p</math>, <math>q</math>, and <math>x</math> are all nonnegative rational numbers).</li> </ul>			X	
<b>Mathematical Practice Standards</b>				
<ul style="list-style-type: none"> <li>MPS1: Make sense of problems and persevere in solving them.</li> <li>MPS2: Reason abstractly and quantitatively.</li> </ul>				
<b>6.EE.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.				
<ul style="list-style-type: none"> <li>† Obj. 1 Students will reason about and solve one-variable inequalities by writing an inequality of the form <math>x &gt; c</math> or <math>x &lt; c</math> to represent a constraint or a condition in a real-world problem and represent the solution on a number line diagram.</li> </ul>				X
<ul style="list-style-type: none"> <li>† Obj. 2 Students will reason about and solve one-variable inequalities by writing an inequality of the form <math>x &gt; c</math> or <math>x &lt; c</math> to represent a constraint or a condition in a mathematical problem and represent the solution on a number line diagram.</li> </ul>				X
<ul style="list-style-type: none"> <li>† Obj. 3 Students will reason about and solve one-variable inequalities by explaining how inequalities of the form <math>x &gt; c</math> or <math>x &lt; c</math> have infinitely many solutions.</li> </ul>				X
<b>Mathematical Practice Standards</b>				
<ul style="list-style-type: none"> <li>MPS2: Reason abstractly and quantitatively.</li> </ul>				
<b>UNIT BIG IDEA/ESSENTIAL QUESTION</b>				
None entered.				
<b>UNIT PERFORMANCE TASKS</b>				
None entered.				
<b>UNIT RESOURCES</b>				
<b>Textbooks</b>				
†MMH California Mathematics Concepts, Skills, and Problem Solving - Sixth Grade <ul style="list-style-type: none"> <li>†Lesson 1-7, 3-1, 3-2, 3-3, 3-5, 3-6</li> </ul>				
<b>Other Texts</b>				
†Ready Common Core-Math 6th Grade †Standards Plus Common Core Edition †Ready Common Core				
<b>UNIT NOTES</b>				
None entered.				

† Added by Course Planner





# UNIT OVERVIEW

## Unit 7

**Content Cluster:** Represent and analyze quantitative relationships between dependent and independent variables.

**Domain:** Expressions and Equations

UNIT STANDARDS & OBJECTIVES	COMPONENTS
	1
<b>6.EE.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.	
<ul style="list-style-type: none"> <li>† <b>Obj. 1</b> Students will represent and analyze quantitative relationships between dependent and independent variables by using variables to represent two quantities in a real-world problem that change in relationship to each other, writing an equation to express one quantity, thought of as the dependent variable, in terms of the other quantity, thought of as the independent variable.</li> </ul>	X
<ul style="list-style-type: none"> <li>† <b>Obj. 2</b> Students will represent and analyze quantitative relationships between dependent and independent variables by analyzing the relationship between the dependent and independent variables, using graphs and relating these to the equation.</li> </ul>	X
<ul style="list-style-type: none"> <li>† <b>Obj. 3</b> Students will represent and analyze quantitative relationships between dependent and independent variables by analyzing the relationship between the dependent and independent variables, using tables and relating these to the equation.</li> </ul>	X
<ul style="list-style-type: none"> <li>† <b>Obj. 4</b> Students will represent and analyze quantitative relationships between dependent and independent variables by writing the equation that represents the relationship between the independent and dependent variables expressed through ordered pairs in tables and graphs.</li> </ul>	X
<b>Mathematical Practice Standards</b> <ul style="list-style-type: none"> <li>• MPS2: Reason abstractly and quantitatively.</li> <li>• MPS4: Model with mathematics.</li> <li>• MPS7: Look for and make use of structure.</li> </ul>	
<b>UNIT BIG IDEA/ESSENTIAL QUESTION</b> None entered.	
<b>UNIT PERFORMANCE TASKS</b> None entered.	
<b>UNIT RESOURCES</b>	
<b>Textbooks</b>	
†MMH California Mathematics Concepts, Skills, and Problem Solving - Sixth Grade <ul style="list-style-type: none"> <li>• †Lesson 1-10</li> </ul>	
<b>Other Texts</b>	
†Standards Plus Common Core Edition †Ready Common Core-Math 6th Grade	
<b>UNIT NOTES</b> None entered.	

† Added by Course Planner



# UNIT OVERVIEW

## Unit 8

**Content Cluster:** Solve real-world and mathematical problems involving area, surface area, and volume.

**Domain:** Geometry

UNIT STANDARDS & OBJECTIVES	COMPONENTS			
	1	2	3	4
<b>6.G.1</b> ✓ 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.				
• † <b>Obj. 1</b> Students will solve real-world problems involving area by finding the area of right triangles, where the height of the right triangle is the side of a right triangle, using composition into rectangles.	X			
• † <b>Obj. 2</b> Students will solve mathematical problems involving area by finding the area of right triangles, where the height of the right triangle is the side of a right triangle, using composition into rectangles.	X			
• † <b>Obj. 3</b> Students will solve real-world problems involving area by finding the area of triangles, where the heights of the triangles either lie over the base or outside the triangle, using composition into rectangles.	X			
• † <b>Obj. 4</b> Students will solve mathematical problems involving area by finding the area of triangles, where the heights of the triangles either lie over the base or outside the triangle, using composition into rectangles.	X			
• † <b>Obj. 5</b> Students will solve real-world problems involving area by finding the area of special quadrilaterals, using decomposition into triangles and other shapes.	X			
• † <b>Obj. 6</b> Students will solve mathematical problems involving area by finding the area of special quadrilaterals, using decomposition into triangles and other shapes.	X			
• † <b>Obj. 7</b> Students will solve real-world problems involving area by finding the area of rectilinear polygons, using decomposition into rectangles.	X			
• † <b>Obj. 8</b> Students will solve real-world problems involving area by finding the area of other (non-rectilinear) polygons, using decomposition into triangles and other shapes.	X			
<b>Mathematical Practice Standards</b>				
• MPS1: Make sense of problems and persevere in solving them.				
• MPS7: Look for and make use of structure.				
• MPS8: Look for and express regularity in repeated reasoning.				
<b>6.G.2</b> ✓ 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.				
• † <b>Obj. 1</b> Students will solve mathematical problems involving volume by finding the volume of a right rectangular prism with fractional edge lengths, packing it with unit cubes of the appropriate unit fraction edge lengths, and showing that the volume is the same as would be found by multiplying the edge lengths of the prism.		X		
• † <b>Obj. 2</b> Students will solve real-world problems involving volume by applying the formula $V = lwh$ to find volumes of right rectangular prisms with fractional edge lengths.		X		

† Added by Course Planner

UNIT STANDARDS & OBJECTIVES	COMPONENTS			
	1	2	3	4
<ul style="list-style-type: none"> <li>† <b>Obj. 3</b> Students will solve real-world problems involving volume by applying the formula <math>V = bh</math> to find volumes of right rectangular prisms with fractional edge lengths.</li> </ul>		X		
<ul style="list-style-type: none"> <li>† <b>Obj. 4</b> Students will solve mathematical problems involving volume by applying the formula <math>V = lwh</math> to find volumes of right rectangular prisms with fractional edge lengths.</li> </ul>		X		
<ul style="list-style-type: none"> <li>† <b>Obj. 5</b> Students will solve mathematical problems involving volume by applying the formula <math>V = bh</math> to find volumes of right rectangular prisms with fractional edge lengths.</li> </ul>		X		
<b>Mathematical Practice Standards</b> <ul style="list-style-type: none"> <li>MPS1: Make sense of problems and persevere in solving them.</li> <li>MPS5: Use appropriate tools strategically.</li> <li>MPS7: Look for and make use of structure.</li> <li>MPS8: Look for and express regularity in repeated reasoning.</li> </ul>				
<b>6.G.3</b> ✓ 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.				
<ul style="list-style-type: none"> <li>† <b>Obj. 1</b> Students will solve real-world problems involving area by drawing polygons in the coordinate plane, given the coordinates for the vertices.</li> </ul>			X	
<ul style="list-style-type: none"> <li>† <b>Obj. 2</b> Students will solve real-world problems involving area by using coordinates to find the length of a side in a figure, joining points with the same first coordinate or the same second coordinate.</li> </ul>			X	
<ul style="list-style-type: none"> <li>† <b>Obj. 3</b> Students will solve mathematical problems involving area by drawing polygons in the coordinate plane, given the coordinates for the vertices.</li> </ul>			X	
<ul style="list-style-type: none"> <li>† <b>Obj. 4</b> Students will solve mathematical problems involving area by using coordinates to find the length of a side in a figure, joining points with the same first coordinate.</li> </ul>			X	
<ul style="list-style-type: none"> <li>† <b>Obj. 5</b> Students will solve mathematical problems involving area by using coordinates to find the length of a side in a figure, joining points with the same second coordinate.</li> </ul>			X	
<b>Mathematical Practice Standards</b> <ul style="list-style-type: none"> <li>MPS4: Model with mathematics.</li> <li>MPS5: Use appropriate tools strategically.</li> <li>MPS6: Attend to precision.</li> <li>MPS7: Look for and make use of structure.</li> </ul>				
<b>6.G.4</b> ✓ 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.				
<ul style="list-style-type: none"> <li>† <b>Obj. 1</b> Students will solve real-world problems involving surface area by using a representation of three-dimensional figures with nets made up of rectangles to find the surface area of the figure.</li> </ul>				X
<ul style="list-style-type: none"> <li>† <b>Obj. 2</b> Students will solve real-world problems involving surface area by using a representation of three-dimensional figures with nets made up of triangles to find the surface area of the figure.</li> </ul>				X

† Added by Course Planner



# UNIT OVERVIEW

UNIT STANDARDS & OBJECTIVES	COMPONENTS			
	1	2	3	4
<ul style="list-style-type: none"> <li>† <b>Obj. 3</b> Students will solve mathematical problems involving surface area by using a representation of three-dimensional figures with nets made up of rectangles to find the surface area of the figure.</li> </ul>				<b>X</b>
<ul style="list-style-type: none"> <li>† <b>Obj. 4</b> Students will solve mathematical problems involving surface area by using a representation of three-dimensional figures with nets made up of triangles to find the surface area of the figure.</li> </ul>				<b>X</b>
<b>Mathematical Practice Standards</b> <ul style="list-style-type: none"> <li>MPS1: Make sense of problems and persevere in solving them.</li> <li>MPS5: Use appropriate tools strategically.</li> <li>MPS6: Attend to precision.</li> </ul>				
<b>UNIT BIG IDEA/ESSENTIAL QUESTION</b> None entered.				
<b>UNIT PERFORMANCE TASKS</b> None entered.				
<b>UNIT RESOURCES</b>				
<b>Textbooks</b> <ul style="list-style-type: none"> <li>†MMH California Mathematics Concepts, Skills, and Problem Solving - Sixth Grade               <ul style="list-style-type: none"> <li>†Lesson 10-4, 10-6, 11-1, 11-2, 11-4, 11-5, 11-6, 11-9, 11-10</li> </ul> </li> </ul>				
<b>Other Texts</b> <ul style="list-style-type: none"> <li>†Ready Common Core-Math 6th Grade</li> <li>†Standards Plus Common Core Edition</li> </ul>				
<b>UNIT NOTES</b> None entered.				

† Added by Course Planner



# UNIT OVERVIEW

## Unit 9

**Content Cluster:** Develop understanding of statistical variability.

**Domain:** Statistics and Probability

UNIT STANDARDS & OBJECTIVES	COMPONENTS		
	1	2	3
<p><b>6.SP.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></p>			
<ul style="list-style-type: none"> <li>† <b>Obj. 1</b> Students will develop understanding of statistical variability by explaining what a valid statistical question is.</li> </ul>	X		
<ul style="list-style-type: none"> <li>† <b>Obj. 2</b> Students will develop understanding of statistical variability by identifying a valid statistical question by choosing from a set of questions.</li> </ul>	X		
<ul style="list-style-type: none"> <li>† <b>Obj. 3</b> Students will develop understanding of statistical variability by creating a valid statistical question.</li> </ul>	X		
<p><b>Mathematical Practice Standards</b></p> <ul style="list-style-type: none"> <li>MPS2: Reason abstractly and quantitatively.</li> <li>MPS3: Construct viable arguments and critique the reasoning of others.</li> </ul>			
<p><b>6.SP.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.</p>			
<ul style="list-style-type: none"> <li>† <b>Obj. 1</b> Students will develop understanding of statistical variability by explaining how the "center," "spread," and "overall shape" can describe the distribution of a set of data.</li> </ul>		X	
<p><b>Mathematical Practice Standards</b></p> <ul style="list-style-type: none"> <li>MPS2: Reason abstractly and quantitatively.</li> </ul>			
<p><b>6.SP.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.</p>			
<ul style="list-style-type: none"> <li>† <b>Obj. 1</b> Students will develop understanding of statistical variability by explaining how 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.</li> </ul>			X
<p><b>Mathematical Practice Standards</b></p> <ul style="list-style-type: none"> <li>MPS2: Reason abstractly and quantitatively.</li> </ul>			
<b>UNIT BIG IDEA/ESSENTIAL QUESTION</b>			
None entered.			
<b>UNIT PERFORMANCE TASKS</b>			
None entered.			
<b>UNIT RESOURCES</b>			
<b>Textbooks</b>			
†MMH California Mathematics Concepts, Skills, and Problem Solving - Sixth Grade <ul style="list-style-type: none"> <li>†Lessons 8-1, 8-2, 8-4, 8-5, 8-6, 8-9</li> </ul>			
<b>Other Texts</b>			
†Ready Common Core-Math 6th Grade †Standards Plus Common Core Edition			

† Added by Course Planner



## UNIT OVERVIEW

UNIT NOTES
None entered.

† Added by Course Planner

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# UNIT OVERVIEW

## Unit 10

**Content Cluster:** Summarize and describe distributions.

**Domain:** Statistics and Probability

UNIT STANDARDS & OBJECTIVES	COMPONENTS				
	1	2	3	4	5
<b>6.SP.4</b> ✓ Display numerical data in plots on a number line, including dot plots, histograms, and box plots.					
• † <b>Obj. 1</b> Students will summarize and describe distributions by displaying numerical data in a dot plot.	X				
• † <b>Obj. 2</b> Students will summarize and describe distributions by displaying numerical data in a histogram.	X				
• † <b>Obj. 3</b> Students will summarize and describe distributions by displaying numerical data in a box plot.	X				
<b>Mathematical Practice Standards</b>					
• MPS2: Reason abstractly and quantitatively.					
<b>6.SP.5a</b> ✓ Reporting the number of observations.					
• † <b>Obj. 1</b> Students will summarize and describe distributions by summarizing numerical data sets in relation to their context, reporting the number of observations.		X			
<b>Mathematical Practice Standards</b>					
• MPS4: Model with mathematics.					
<b>6.SP.5b</b> ✓ Describing the nature of the attribute under investigation, including how it was measured and its units of measurement.					
• † <b>Obj. 1</b> Students will summarize and describe distributions by summarizing numerical data sets in relation to their context and describing the nature of the attribute under investigation, including how it was measured and its units of measurement.			X		
<b>Mathematical Practice Standards</b>					
• MPS6: Attend to precision.					
<b>6.SP.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>Obj. 1</b> Students will summarize and describe distributions by summarizing numerical data sets in relation to their context, giving quantitative measures of center (median and/or mean).				X	
• † <b>Obj. 2</b> Students will summarize and describe distributions by summarizing numerical data sets in relation to their context, giving quantitative measures of variability (interquartile range and/or mean absolute deviation).				X	
• † <b>Obj. 3</b> Students will summarize and describe distributions by summarizing numerical data sets in relation to their context, describing any overall pattern and any striking deviations from the overall pattern with reference to the context in which the data were gathered.				X	
<b>Mathematical Practice Standards</b>					
• MPS2: Reason abstractly and quantitatively.					
• MPS3: Construct viable arguments and critique the reasoning of others.					
<b>6.SP.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.					

† Added by Course Planner



# UNIT OVERVIEW

UNIT STANDARDS & OBJECTIVES	COMPONENTS				
	1	2	3	4	5
<ul style="list-style-type: none"> <li>† Obj. 1 Students will summarize and describe distributions by summarizing numerical data sets in relation to their context, 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.</li> </ul>					X
<b>Mathematical Practice Standards</b> <ul style="list-style-type: none"> <li>MPS2: Reason abstractly and quantitatively.</li> </ul>					
<b>UNIT BIG IDEA/ESSENTIAL QUESTION</b> None entered.					
<b>UNIT PERFORMANCE TASKS</b> None entered.					
<b>UNIT RESOURCES</b>					
<b>Textbooks</b>					
†MMH California Mathematics Concepts, Skills, and Problem Solving - Sixth Grade <ul style="list-style-type: none"> <li>†Lessons 8-1, 8-2, 8-4, 8-5, 8-6, 8-9</li> </ul>					
<b>Other Texts</b>					
†Ready Common Core-Math 6th Grade †Standards Plus Common Core Edition					
<b>UNIT NOTES</b> None entered.					

† Added by Course Planner