

CPM Sixth Grade Pacing Calendar and Standards Alignment

 - Non-Math Teaching days/ Holidays

First Semester Instructional Days	1	2	3	4	5			6	7	8	9	10			11	12	13	14	15			16	17	18	19	20			21	22	23			
Sept.								Chapter 1							Chapter 1							Chapter 1							Ch 1					
Oct.	Chapter 2							Chapter 2							Chapter 2							Chapter 3							Ch 3					
Nov.	Chapter 3							Chapter 3							Chapter 4							Chapter 4								Ch 4				
Dec.	Chapter 4							Chapter 5							Chapter 5							Chapter 5												
Jan.			Ch 5					Chapter 5							Ch 5	Review						Exam					Ch 6					Chapter 6		

Chapter 1 (16 days)	Chapter 2 (15 days)	Chapter 3 (17 days)	Chapter 4 (14 days)	Chapter 5 (20 days)
<p><b>Introduction and Representation:</b> Welcome to math class! This chapter will introduce you to the mathematical practices that you will be using and working with throughout this course and beyond. You will start by working with your classmates to solve a series of challenging problems. These problems preview some of the mathematics that you will be learning throughout the year.</p> <p>In Section 1.1 you will work on several challenging investigations with your team, some of which you will revisit later in this course. The main purpose of these problems is to introduce some of the big concepts of this math course, such as organizing data and using mathematical reasoning to make predictions.</p> <p>Then in Section 1.2, you will develop multiple ways to represent (or show) mathematical ideas. You will represent your ideas using numbers, symbols, diagrams, words, and various kinds of graphs and tables.</p>	<p><b>Arithmetic Strategies and Area:</b> In the beginning of this chapter, you will continue your focus on representation from Chapter 1.</p> <p>You will do experiments and learn several ways to display and understand the results of your experiments.</p> <p>Then, in Section 2.2, you will investigate area and how to measure it. You will also explore the relationship between area and perimeter and think about how changing one affects the other.</p> <p>In Section 2.3, you will focus on multiplication. You will use your understanding of our base ten number system to visualize multiplication in new ways. This will allow you to calculate products efficiently.</p>	<p><b>Portions and Integers:</b> This chapter begins with a focus on multiple ways to represent portions, such as percents, decimals, and fractions.</p> <p>You will use 100% blocks as a tool to explore the relationships between the equivalent representations of portions. You will also connect portions to ratios.</p> <p>In Section 3.2, you will describe how a point moves on a number line by adding integers. You will also learn about absolute value and how to find the length of a line segment on a coordinate graph.</p>	<p><b>Variables and Ratios:</b> Are you ready to strengthen your pre-algebra skills? One skill that is essential for algebra is figuring out unknown amounts.</p> <p>In Section 4.1, you will begin to think about how to do so. You will use variables to represent unknown quantities and will use what you know about a problem to find the value of these variables.</p> <p>In Section 4.2, you will move from mystery numbers to a mystery mascot. With your class, you will work to enlarge the mystery mascot. Then you will learn how to enlarge or reduce figures while keeping their shapes the same. You will use ratios to compare the side lengths of figures to determine if they are the same shape.</p>	<p><b>Multiplying Fractions and Area:</b> You know about multiplying, and you know about fractions; in this chapter, you will learn about multiplying fractions!</p> <p>In Section 5.1, you will calculate portions of fractions, or “parts of parts.” You will use these ideas to develop strategies for multiplying fractions and mixed numbers.</p> <p>In Section 5.2, your new knowledge of multiplying fractions will help you understand decimal multiplication. You will also investigate how multiplying by a number close to, much larger than, or much smaller than 1 affects size of the product.</p> <p>Section 5.3 focuses on the question, “How can we use what we know about the areas of basic shapes to find the areas of complex shapes?” As you develop new strategies for finding the areas of shapes, you will be able to solve new problems that involve more complex areas.</p>

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Second Semester Instructional Days	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
Jan.	■	■	Ch 5			Chapter 5					Ch 5		Review			Exam		Ch 6		Chapter 6				
Feb.	Chapter 6					Chapter 6					Chapter 6			■			Chapter 6			Chapter 7				
March	Chapter 7					Chapter 7					Chapter 7					Chapter 7		■		■		■		
April	Chapter 8					Chapter 8					Chapter 8					Chapter 8					■			
May	Chapter 9					Chapter 9					Chapter 9					Chapter 9					■			
June	Review/Exam					■					■					■								

Chapter 6 (19 days)	Chapter 7 (18 days)	Chapter 8 (21 days)	Chapter 9 (20 days)
<p><b>Dividing and Building Expressions:</b> In the previous chapter, you worked with multiplication. Now you will turn your attention to division.</p> <p>In Section 6.1, you will find ways to divide different amounts of licorice among different numbers of people. You will gain a deep understanding of division by using diagrams and pictures to model it. The strategies that you develop in this chapter will help you in Chapter 7 when you will work further with division.</p> <p>You will begin Section 6.2 by building expressions with a new tool called “algebra tiles.” You will use variables to describe the perimeters and areas of shapes built with tiles when one dimension is unknown or can represent various lengths.</p>	<p><b>Rates and Operations:</b> In Japan, speed-limit signs on the highway read, “Speed Limit 100.” Are people, in Japan, allowed to drive faster than people in the United States?</p> <p>In Section 7.1, you will explore questions involving rate, like this one. You will also learn how to find unit rates to make comparisons. You will examine races called triathlons to discover when rates will be the same and when they will be different.</p> <p>In Section 7.2, you will extend your previous understanding of division with fractions to include division with mixed numbers and decimals. You will discover efficient methods to divide with these portions.</p> <p>In Section 7.3, you will use mathematical operations to do mathematical “magic” tricks. You will also learn how the tricks work and be able to create your own tricks using variables and algebra tiles.</p>	<p><b>Statistics and Multiplication Equations:</b> Do you remember learning about the famous Calaveras County frog-jumping contest in Chapter 1?</p> <p>In Section 8.1, you will return to the data from the frog-jumping contest. This time, you will use new tools to analyze and compare groups of frogs. You will also look at more ways to display and interpret the data.</p> <p>In Section 8.2, you will transition to the subject of statistics. Your work in this section will build on your knowledge of statistics to look at statistical questions.</p> <p>Then, in Section 8.3, you will work with more real-life situations, revisiting math ideas you have already studied and learning new strategies to apply to new contexts. When traveling in a car, for example, have you ever asked, “When are we going to get there?” Did you know that you could use mathematics to answer that question?</p> <p>In Section 8.3, you will use diagrams like the ones you used for percents to find the relationship between distance, rate, and time. You will also learn how to compare quantities that are very different.</p>	<p><b>Volume and Percents:</b> Congratulations on reaching the last chapter of this math course! Now you get to extend your thinking about various topics you have studied this year.</p> <p>You will begin this chapter by extending your work with measuring lengths and area. Here you will measure the surface area and volume of three-dimensional objects. You will practice visualizing three-dimensional solids and how their parts fit together. You will use “flattened” shapes, called nets, to do this.</p> <p>In Section 9.2 you will extend your work with percents to calculate percent discounts, tips, and interest earned. Percents are all around you, such as 20% off at clothing stores, 8.75% sales tax, and 20% tips in restaurants, and now you get to explore them in even more detail.</p> <p>Finally, in the course closure and reflection (Section 9.3), you will work with your team to solve challenging problems that allow you to reflect about your learning from this entire course.</p>

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Chapter 1 Rec 12 Days	Chapter 2 Rec 11 Days	Chapter 3 Rec 13 Days	Chapter 4 Rec 10 Days	Chapter 5 Rec 13 Days	Chapter 6 Rec 14 Days	Chapter 7 Rec 14 Days	Chapter 8 Rec 13 Days	Chapter 9 Rec 14 Days
<u>Standards</u>	<u>Standards</u>	<u>Standards</u>	<u>Standards</u>	<u>Standards</u>	<u>Standards</u>	<u>Standards</u>	<u>Standards</u>	<u>Standards</u>
6.NS.4	6.NS.4	6.RP.1	6.RP.1	6.RP.3c	6.NS.1	6.RP.2	6.RP.3b	6.RP.3c
6.EE.1	6.EE.3	6.RP.3c	6.EE.2a	6.NS.1	6.NS.2	6.RP.3a	6.RP.3d	6.G.2
6.G.1	6.G.1	6.NS.3	6.EE.2c	6.NS.3	6.EE.1	6.RP.3b	6.EE.7	6.G.4
6.SP.4	6.SP.4	6.NS.4	6.EE.4	6.G.1	6.EE.2b	6.NS.1	6.EE.9	MP1
MP1	MP4	6.NS.5	6.EE.6	MP1	6.EE.2c	6.NS.3	6.SP.1 6.SP.2	MP2
MP2	MP5	6.NS.6a	MP1	MP2	6.EE.3	6.EE.2a	6.SP.3 6.SP.4	MP6
MP3		6.NS.6b	MP3	MP3	6.EE.4	6.EE.3	6.SP.5a 6.SP.5b	
MP6		6.NS.6c	MP4	MP5	6.EE.6	6.EE.5	6.SP.5c 6.SP.5d	
MP7		6.NS.7a 6.NS.7b	MP6	MP6	MP1	6.EE.6	MP1 MP2	
MP8		6.NS.7c 6.NS.7d	MP7	MP7	MP5	6.EE.7	MP3 MP4	
		6.NS.8 6.G.3			MP6	6.EE.8	MP5 MP6	
		MP1 MP2				MP1 MP3	MP7 MP8	
		MP6				MP6 MP7		
<b>RP – Ratios and Proportional Relationships</b> • Understand ratio concepts and use ratio reasoning to solve problems	<b>NS – The Number System</b> • Apply and extend previous understandings of multiplication and division to divide fractions by fractions. • Compute fluently with multi-digit numbers and find common factors and multiples. • Apply and extend previous understandings of numbers to the system of rational numbers.		<b>EE - Expressions and Equations</b> • Apply and extend previous understandings of arithmetic to algebraic expressions. • Reason about and solve one-variable equations and inequalities. • Represent and analyze quantitative relationships between dependent and independent variables.		<b>G – Geometry</b> • Solve real-world and mathematical problems involving area, surface area, and volume.	<b>SP – Statistics and Probability</b> • Develop understanding of statistical variability. • Summarize and describe distributions.		<b>MP – Mathematical Practice Standards</b> 1. Make sense of problems and persevere in solving them. 2. Reason abstractly and quantitatively. 3. Construct viable arguments and critique the reasoning of others. 4. Model with mathematics. 5. Use appropriate tools strategically. 6. Attend to precision. 7. Look for and make use of structure. 8. Look for and express regularity in repeated reasoning.