Grade 7

CCLS Code	Standard	Content Emphasis	Sept.-April/ May-June Instructional Periods
Ratios and Proportional Relationships			
7.RP.1	Compute unit rates associated with ratios of fractions, including ratios of lengths, areas and other quantities measured in like or different units.	Major	Sept.-April
7.RP.2	Recognize and represent proportional relationships between quantities	Major	Sept.-April
7.RP.3	Use proportional relationships to solve multistep ratio and percent problems	Major	Sept.-April
The Number System			
7.NS.1	Apply and extend previous understandings of addition and subtraction to add and subtract rational numbers; represent addition and subtraction on a horizontal or vertical number line diagram	Major	Sept.-April
7.NS.2	Apply and extend previous understandings of multiplication and division and of fractions to multiply and divide rational numbers.	Major	Sept.-April
7.NS.3	Solve real-world and mathematical problems involving the four operations with rational numbers	Major	Sept.-April
Expressions and Equations			
7.EE.1	Apply properties of operations as strategies to add, subtract, factor, and expand linear expressions with rational coefficients.	Major	Sept.-April
7.EE.2	Understand that rewriting an expression in different forms in a problem context can shed light on the problem and how the quantities in it are related.	Major	Sept.-April
7.EE.3	Solve multi-step real-life and mathematical problems posed with positive and negative rational numbers in any form (whole numbers, fractions, and decimals), using tools strategically. Apply properties of operations to calculate with numbers in any form; convert between forms as appropriate; and assess the reasonableness of answers using mental computation and estimation strategies.	Major	Sept.-April
7.EE.4	Use variables to represent quantities in a real-world or mathematical problem, and construct simple equations and inequalities to solve problems by reasoning about the quantities. a. Solve word problems leading to equations of the form $px + q = r$ and $p(x + q) = r$, where p, q, and r are specific rational numbers. Solve equations of these forms fluently. Compare an algebraic solution to an arithmetic solution, identifying the sequence of the operations used in each approach. b. Solve word problems leading to inequalities of the form $px + q > r$ or $px + q < r$, where p, q, and r are	Major	Sept.-April

	specific rational numbers. Graph the solution set of the inequality and interpret it in the context of the problem.		
Geometry			
7.G.1	Solve problems involving scale drawings of geometric figures, such as computing actual lengths and areas from a scale drawing and reproducing a scale drawing at a different scale.	Additional	Sept.-April
7.G.2	Draw (freehand, with ruler and protractor, and with technology) geometric shapes with given conditions. Focus on constructing triangles from three measures of angles or sides, noticing when the conditions determine a unique triangle, more than one triangle, or no triangle.	Additional	May-June
7.G.3	Describe the two-dimensional figures that result from slicing three-dimensional figures, as in plane sections of right rectangular prisms and right rectangular pyramids.	Additional	May-June
7.G.4	Know the formulas for the area and circumference of a circle and solve problems; give an informal derivation of the relationship between the circumference and area of a circle.	Additional	Sept.-April
7.G.5	Use facts about supplementary, complementary, vertical, and adjacent angles in a multi-step problem to write and use them to solve simple equations for an unknown angle in a figure	Additional	May-June
7.G.6	Solve real-world and mathematical problems involving area, volume and surface area of two- and three-dimensional objects composed of triangles, quadrilaterals, polygons, cubes, and right prisms	Additional	May-June
Statistics and Probability			
7.SP.1	Understand that statistics can be used to gain information about a population by examining a sample of the population; generalizations about a population from a sample are valid only if the sample is representative of that population. Understand that random sampling tends to produce representative samples and support valid inferences.	Supporting	Sept.-April
7.SP.2	Use data from a random sample to draw inferences about a population with an unknown characteristic of interest. Generate multiple samples (or simulated samples) of the same size to gauge the variation in estimates or predictions	Supporting	Sept.-April
7.SP.3	Informally assess the degree of visual overlap of two numerical data distributions with similar variabilities, measuring the difference between the centers by expressing it as a multiple of a measure of variability.	Additional	Sept.-April
7.SP.4	Use measures of center and measures of variability for numerical data from random samples to draw informal comparative inferences about two populations.	Additional	Sept.-April
7.SP.5	Understand that the probability of a chance event is a number between 0 and 1 that expresses the	Supporting	Sept.-April

	likelihood of the event occurring. Larger numbers indicate greater likelihood.		
7.SP.6	Approximate the probability of a chance event by collecting data on the chance process that produces it and observing its long-run relative frequency, and predict the approximate relative frequency given the probability.	Supporting	Sept.-April
7.SP.7	Develop a probability model and use it to find probabilities of events. Compare probabilities from a model to observed frequencies; if the agreement is not good, explain possible sources of the discrepancy	Supporting	Sept,-April
7.SP.8	Find probabilities of compound events using organized lists, tables, tree diagrams, and simulation.	Supporting	Sept.-April

Key to Common Core Learning Standard (CCLS) Code:	7.G.4 7 = 7th Grade G = Geometry 4 = CCLS number

Note: Some standards have lettered components (a, b, c…) that help to make up the standard. If a standard is placed in the May-June instructional period, so are all of its lettered components.