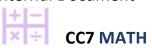
Sterling Middle School Scope and Sequence

Internal Document





Block 1: Identity & Character		
Central Concepts	Supporting Concepts	
 Chapter 1 Integers Chapter 2 Rational Numbers Chapter 8 Circles and Area 	 1.1 Integers and Absolute Value 1.2 Adding Integers 1.3 Subtracting Integers 1.4 Multiplying Integers 1.5 Dividing Integers 2.1 Rational Numbers 2.2 Adding Rational Numbers 2.3 Subtracting Rational Numbers 2.4 Multiplying and Dividing Rational Numbers 8.1 Circles and Circumference 8.2 Perimeters of Composite Figures 8.3 Area of Circles 	
Central Question(s)	NC State Standards Alignment	
Chapter 1 Integers How can you use integers to represent the velocity and the speed of an object? Is the sum of two integers positive, negative, or zero? How can you tell? How are adding integers and subtracting integers related? Is the product of two integers positive, negative, or zero? How can you tell? Is the quotient of two integers positive, negative, or zero? How can you tell? Chapter 2 Rational Numbers How can you use a number line to order rational numbers? How can you use what you know about adding integers to add rational numbers? How can you use what you know about subtracting integers to subtract rational numbers? Why is the product of two negative rational numbers positive? Chapter 8 Circles and Area How can you find the circumference of a circle? How can you find the area of a composite figure? How can you find the area of a composite figure?	 Integers 7.NS.1, 7.NS.2, 7.NS.3 Rational Numbers 7.NS.1, 7.NS.2, 7.NS.3 Circles and Area 7.G.4, 7.G.6 	

Block 2: Systems & Organizations		
Central Concepts	Supporting Concepts	
 Chapter 9 Surface Area and Volume Chapter 3 Expressions and Equations Chapter 4 Inequalities 	 9.1 Surface Area of Prisms 9.2 Surface Area of Pyramids 9.3 Surface Area of Cylinders 9.4 Volumes of Prisms 9.5 Volumes of Pyramids 3.1 Algebraic Expressions (7.EE1, 7.EE.2) 3.2 Adding and Subtracting Linear Expressions (7.EE.1, 7.EE.2) 3.3 Solving Equations Using Addition or Subtraction (7.EE.4a) 3.4 Solving Equations Using Multiplication or Division (7.EE.4a) 3.5 Solving Two-Step Equations (7.EE.4a) 4.1 Writing and Graphing Inequalities (7.EE.4b) 4.2 Solving Inequalities Using Addition or Subtraction (7. EE.4b) 4.3 Solving Inequalities Using Multiplication or Division (7. EE.4b) 4.4 Solving Two-Step Inequalities (7. EE.4b) 	
Central Question(s)	NC State Standards Alignment	
Chapter 9 Surface Area and Volume How can you find the surface area of a prism? How can you find the surface area of a pyramid? How can you find the surface area of a cylinder? How can you find the volume of a prism? How can you find the volume of a pyramid? Chapter 3 Expressions and Equations How can you simplify an algebraic expression? How can you use algebra tiles to add or subtract algebraic expressions? How can you use algebra tiles to solve addition or subtraction equations? How can you use multiplication or division to solve equations? How can you use algebra tiles to solve a two-step equation? Chapter 4 Inequalities How can you use a number line to represent solutions of an inequality? How can you use an inequality? How can you use an inequality to describe the dimensions of a figure?	 Surface Area and Volume 7.G.3, 7.G.4, 7. G.6 Expressions and Equations 7.EE1, 7.EE.2, 7.EE.4a Inequalities 7.EE.4b 	

Central Concepts Chapter 5 Ratios and Proportions Chapter 6 Percents Chapter 6 Percents Chapter 6 Percents Chapter 6 Percents Central Question(s) Central Question(s) Central Question(s) Central Question(s) Chapter 5 Ratios and Proportions 5.5 Slope 5.6 Direct Variation 6.1 Percents and Decimals (7.EE.3) 6.2 Comparing and Ordering Fractions, Decimals, and Percents (7.EE.3) 6.3 The Percent Teroportion (7.RP.3) 6.4 The Percent Equation (7.RP.3, 7.EE.3) 6.5 Percents of Increase and Decrease (7.RP.3) 6.6 Discounts and Markups (7.RP.3) 6.7 Simple Interest (7.RP.3) 6.8 Percents of Increase and Decrease (7.RP.3) 6.9 Percents of Increase and De	Block 3: Conn	Block 3: Connections & Associations		
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	How can you find the amount of interest owed on a loan?			

Block 4: Explorations & Discoveries		
Central Concepts	Supporting Concepts	
 Chapter 7 Construction and Scale 	o 7.1 Adjacent and Vertical Angles (7.G.5)	
 Chapter 10 Probability and Statistics 	 7.2 Complementary and Supplementary Angles (7.G.5) 	
	o 7.3 Triangles (7.G.2, 7.G.5)	
	o 7.4 Quadrilaterals (7.G.2)	
	o 7.5 Scale Drawings (7.G.1)	
	O 10.1 Outcomes & Events	
	o 10.2 Probability	
	 10.3 Experimental & Theoretical Probability 	
	O 10.4 Compound Events	
	10.5 Independent & Dependent Events	
	O 10.6 Samples & Populations	
	O 10.7 Comparing Populations	
Central Question(s)	NC State Standards Alignment	
Chapter 7 Construction and Scale	o Construction and Scale 7.G.5, 7.G.2, 7.G.1	
What can you conclude about the angles formed by two	 Probability and Statistics 7.SP.1, 7.SP.2, 7. SP.3, 7.SP.4, 	
intersecting lines? How can you classify two angles as	7.SP.5, 7.SP.6, 7.SP.7, 7.SP.8	
complementary or supplementary? How can you construct		
triangles?		
How can you classify quadrilaterals?		
How can you enlarge or reduce a drawing proportionally?		
Chapter 10 Probability and Statistics		
In an experiment, how can you determine the number of		
possible results? How can you describe the likelihood of an event?		
How can you use relative frequencies to find probabilities?		
How can you find the number of possible outcomes of one		
or more events? What is the difference between		
dependent and independent events?		
How can you determine whether a sample accurately		
represents a population?		
How can you compare data sets that represent two		
populations?		
	1	