Transition Mathematics

Chapter 1: Reading and Writing Numbers

Chapter Overview	Common Core State Standards	Pacing *(in days)*		
		Average	Advanced	Block
1-1 Numbers in Everyday Use **B** Convert powers and word names for numbers to decimals. **J** Understand uses of rational numbers in real situations.	**Reviews 5.NBT.1, 5.NBT.3**	1	0.5	0.5
1-2 Positive and Negative Numbers **F** Use < and > symbols to order numbers. **I** Interpret situations with two directions as positive, negative, or zero. **L** Graph and read numbers on a number line.	**Reviews 6.NS.5, 6.NS.6**	1	0.5	0.5
1-3 Rational Numbers and Their Uses **G** Know the definition of rational numbers. **J** Understand uses of rational numbers in real situations.	**7.RP.1, 7.NS.2b**	1	1	0.5
1-4 Powers of Ten and Other Numbers **A** Perform arithmetic operations. **B** Convert powers and word names for numbers to decimals. **D** Multiply by powers of ten.	**Reviews 5.NBT.2, 6.EE.1**	1	1	0.5
QUIZ		0.5	0.5	0.25
1-5 More Powers of Ten **B** Convert powers and word names for numbers to decimals. **D** Multiply by powers of ten**.**	**Reviews 5.NBT.2, 6.EE.1**	1	1	0.5
1-6 Order of Operations **A** Perform arithmetic operations. **C** Use grouping symbols and the rules for the order of operations to evaluate numerical expressions.	**Reviews 6.EE.2c**	1	0.5	0.5
1-7 Other Grouping Symbols **C** Use grouping symbols and the rules for the order of operations to evaluate numerical expressions.	**Reviews 6.EE.2c**	1	0.5	0.5
1-8 Scientific Notation **A** Use a calculator to perform arithmetic operations. **H** Recognize whether numbers are written in scientific notation.	**Anticipates 8.EE.4**	1	1	0.5
QUIZ		0.5	0.5	0.25
1-9 Plotting Points on Coordinate Graphs **M** Know the structure of the coordinate grid and how to represent data on it.	**Reviews 6.NS.6a, 6.NS.6b, 6.NS.6c, 6.NS.8**	1	1	0.5
1-10 Graphing Data on a Calculator **K** Interpret information from scatterplots. **M** Know the structure of the coordinate grid and how to represent data on it.	**Reviews 6.NS.6a, 6.NS.6b, 6.NS.6c**	1	1	0.5
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	Chapter Review	2	1	0.5
	Test	1	1	0.5
	Total	15	12	7

Chapter 2: Using Variables

Chapter Overview	Common Core State Standards	Pacing (in days)		
		Average	Advanced	Block
2-1 Describing Patterns with Variables **E** Given instances of a pattern, write a description of the pattern using variables. **F** Give instances of a pattern described with variables. **G** Given instances of a real-world pattern, write a description of the pattern using variables. **L** Represent a relationship between two variables using a table.	**7.EE.4**	1	1	0.5
2-2 Translating Words into Algebraic Expressions **C** Write a numerical or algebraic expression for an English expression involving arithmetic operations.	**7.EE.4**	1	1	0.5
2-3 Evaluating Algebraic Expressions **A** Evaluate algebraic expressions given the values of all variables in them.	**Reviews 6.EE.1, 6.EE.2a, 6.EE.2c**	1	0.5	0.5
QUIZ		0.5	0.5	0.25
2-4 Expressions and Formulas **H** Calculate the value of a variable given the values of other variables in a formula.	**Reviews 6.EE.1, 6.EE.2a, 6.EE.2c**	1	0.5	0.5
2-5 The Pythagorean Theorem **D** Find the length of the hypotenuse of a right triangle using the Pythagorean Theorem. **I** Use the Pythagorean Theorem to find distances in real situations.	**Anticipates 8.G.7, 8.G.8**	1	1	0.5
2-6 Formulas in Spreadsheets **K** Use a calculator or spreadsheet to construct formulas and apply them to real-life situations.	**Standard for Mathematical Practice 2:** Use appropriate tools strategically.	1	1	0.5
QUIZ		0.5	0.5	0.25
2-7 Open Sentences **B** Find solutions to equations and inequalities involving simple arithmetic.	**Reviews 6.EE.5, 6.EE.6, 6.EE.7, 6.EE.8**	1	0.5	0.5
2-8 Graphing Inequalities **J** Graph solutions to simple inequalities.	**Reviews 6.NS.7a, 6.EE.5, 6.EE.8**	1	0.5	0.5
	Self-Test	1	1	0.5
	Chapter Review	1	1	1
	Test	1	1	0.5
	Total	12	10	6.5

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Chapter 3: Representing Numbers

Chapter Overview	Common Core State Standards	Pacing (in days)		
		Average	Advanced	Block
3-1 Decimals for Numbers between Integers	Reviews 5.NBT.3b, 6.NS.6, 6.NS.8	1	1	0.5
A Order and compare decimals and fractions.				
N Graph and read numbers on number lines and coordinate grids.				
3-2 Equal Fractions	Reviews 4.NF.1, 4.NF.2, 5.NBT.3b, 6.NS.4	1	1	0.5
A Order and compare decimals and fractions.				
G Use the Equal-Fractions Property to rewrite fractions.				
3-3 Adding and Subtracting Fractions	Reviews 5.NF.1, 5.NF.2, 6.NS.4	2	1	0.5
B Add and subtract fractions.				
J Use fractions to answer questions in real situations.				
QUIZ		0.5	0.5	0.25
3-4 Estimating by Rounding	7.EE.3	1	1	0.5
C Round any number up, down, or to the nearest value of a fractional or decimal place.				
J Use fractions to answer questions in real situations.				
K Deal with estimates in real situations.				
3-5 Fraction-Decimal Equivalence	7.NS.2d	1	1	0.5
A Order and compare decimals and fractions.				
D Convert among decimals, fractions, and percents.				
H Correctly use the raised-bar symbol for repeating decimals.				
J Use fractions to answer questions in real situations.				
3-6 Fractions, Decimals, and Percents	7.NS.2d	2	1	0.5
D Convert among decimals, fractions, and percents.				
I Know and apply the Substitution Principle.				
QUIZ		0.5	0.5	0.25
3-7 Percents	7.RP.3	1	1	0.5
D Convert among decimals, fractions, and percents.				
E Calculate the percent of a quantity.				
I Know and apply the Substitution Principle.				
3-8 Square Roots	Anticipates 8.EE.2, 8.G.7	1	1	0.5
F Estimate the square root of a number to a stated decimal place.				
L Use square roots in real situations.				
O Apply the geometric definition of square root.				
3-9 Probability	7.SP.6, 7.SP.7, 7.SP.7a, 7.SP.7b	1	1	0.5
M Calculate probabilities involving mutually exclusive events.				
	Self-Test	1	1	0.5
	Chapter Review	2	1	0.5
	Test	1	1	0.5
	Total	16	13	6.5

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Chapter 4: Representing Sets of Numbers and Shapes

Chapter Overview	Common Core State Standards	Pacing *(in days)*		
		Average	Advanced	Block
4-1 Three Little Words: *Always, Sometimes, Never* **C** Identify statements as *always*, *sometimes but not always*, or *never* true. **I** Apply hierarchies and Venn diagrams to real-world situations. **K** Use Venn diagrams and hierarchies to describe relationships among sets.	**Standard for Mathematical Practice 6:** Attend to precision.	1	1	0.5
4-2 Properties of Numbers **D** Apply the following properties: Additive Identity Property of Zero, Property of Opposites, and Opposite of Opposites Property.	**7.NS.1a, 7.NS.1b, 7.NS.1d**	1	1	0.5
4-3 If-Then Statements **E** Write if-then statements and their converses.	**Reviews 5.G.3, 5.G.4; Anticipates 8.G.6**	2	1	0.5
QUIZ		0.5	0.5	0.25
4-4 Union and Intersection of Sets **A** Determine the union and intersection of sets. **I** Apply hierarchies and Venn diagrams to real-world situations. **J** Describe unions and intersections of inequalities geometrically. **K** Use Venn diagrams and hierarchies to describe relationships among sets.	**Standard for Mathematical Practice 6:** Attend to precision.	1.5	1	0.5
4-5 The Basic Figures of Geometry **B** Draw and identify basic figures of geometry and polygons.	**Reviews 4.G.1**	1	1	0.5
4-6 Unions and Basic Geometric Shapes **B** Draw and identify basic figures of geometry and polygons. **C** Identify statements as *always*, *sometimes but not always*, or *never* true. **F** Apply the definition of polygon to various figures.	**Reviews 4.MD.5, 4.MD.6, 4.G.1**	1.5	1	0.5
QUIZ		0.5	0.5	0.25
4-7 What Makes a Good Definition? **G** Apply the properties of a good definition.	**7.G.5**	1	1	0.5
4-8 Classifying Shapes **C** Identify statements as *always*, *sometimes but not always*, or *never* true. **I** Apply hierarchies and Venn diagrams to real-world situations. **K** Use Venn diagrams and hierarchies to describe relationships among sets.	**Reviews 5.G.4**	1	1	0.5
4-9 Classifying Numbers **H** Identify the following types of numbers by their characteristics: real numbers, rational numbers, irrational numbers, positive numbers, negative numbers, integers, whole numbers, odd numbers, even numbers, and prime numbers. **K** Use Venn diagrams and hierarchies to describe relationships among sets.	**Reviews 6.NS.5; Anticipates 8.NS.1**	1	1	0.5
Self-Test		1	1	0.5
Chapter Review		2	1	0.5
Test		1	1	0.5
Total		16	13	6.5

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Chapter 5: Patterns Leading to Addition and Subtraction

Chapter Overview	Common Core State Standards	Pacing *(in days)*		
		Average	Advanced	Block
5-1 Models for Addition **A** Add and subtract positive and negative numbers. **E** Apply properties of addition and subtraction to simplify expressions. **F** Recognize uses of the Commutative and Associative Properties of Addition and the Addition Property of Equality. **G** Use the Putting-Together and Slide Models for Addition to describe situations leading to addition. **M** Graph addition and subtraction of positive and negative numbers using arrows on a number line.	**7.NS.1, 7.NS.3, 7.EE.2, 7.EE.3, 7.G.5**	1	1	0.5
5-2 Rules for Adding Positive and Negative Numbers **A** Add and subtract positive and negative numbers. **B** Calculate absolute value. **E** Apply properties of addition and subtraction to simplify expressions. **F** Recognize uses of the Commutative and Associative Properties of Addition and the Addition Property of Equality. **L** Calculate magnitudes of turns given angle measures or revolutions. **M** Graph addition and subtraction of positive and negative numbers using arrows on a number line.	**7.NS.1, 7.NS.3**	2	1	0.5
5-3 Models for Subtraction **A** Add and subtract positive and negative numbers. **E** Apply properties of addition and subtraction to simplify expressions. **I** Use the Take-Away and Comparison Models for Subtraction to describe situations leading to subtraction. **M** Graph addition and subtraction of positive and negative numbers using arrows on a number line.	**7.NS.1, 7.NS.3, 7.EE.2, 7.EE.3**	2	1	0.5
5-4 Connecting Addition and Subtraction **K** Use fact triangles to depict relationships between numbers.	**7.NS.1, 7.NS.3, 7.EE.2, 7.EE.3**	1	1	0.5
QUIZ		0.5	0.5	0.25
5-5 Solving $x + a = b$ **C** Solve equations of the form $x + a = b$ and inequalities of the form $x + a < b$. **F** Recognize uses of the Commutative and Associative Properties of Addition and the Addition Property of Equality.	**7.EE.2, 7.EE.3, 7.EE.4**	2	1	0.5
5-6 Solving $x + a < b$ **C** Solve equations of the form $x + a = b$ and inequalities of the form $x + a < b$.	**7.EE.4**	1	1	0.5
5-7 Understanding $x + y = k$ **N** Graph solutions to equations of the form $x + y = k$ or $x - y = k$.	**7.EE.4**	2	1	0.5
5-8 Adding and Probabilities **H** Calculate probabilities involving mutually exclusive events or events with overlap.	**7.SP.8, , 7.SP.8a, 7.SP.8b**	1	1	0.5
QUIZ		0.5	0.5	0.25
5-9 Introduction to Constructions **D** Construct triangles using a compass and a straightedge.	**7.G.1, 7.G.2**	1	1	0.5
5-10 The Triangle Inequality **J** Use the Triangle Inequality to approximate lengths of the third side of a triangle given the lengths of the other two sides.	**7.G.2**	1	1	0.5
	Self-Test	1	1	0.5
	Chapter Review	2	1	1
	Test	1	1	0.5
	Total	19	14	7.5

Chapter 6: Some Important Geometry Ideas

Chapter Overview	Common Core State Standards	Pacing (in days)		
		Average	Advanced	Block
6-1 Translations	Anticipates 8.G.2. 8.G.3	1	1	0.5
J Translate and reflect figures on a coordinate graph.				
6-2 Reflections and Reflection Symmetry	Anticipates 8.G.2. 8.G.3	1	1	0.5
A Reflect figures over a line.				
E Determine reflection and rotation symmetries of a figure.				
J Translate and reflect figures on a coordinate graph.				
6-3 Rotations and Rotation Symmetry	Anticipates 8.G.2. 8.G.3	1	1	0.5
B Draw the rotation image of a point or figure.				
E Determine reflection and rotation symmetries of a figure.				
6-4 Tessellations	7.G.1	2	1	0.5
C Create tessellations of polygons.				
QUIZ		0.5	0.5	0.25
6-5 Angles and Lines	7.G.5	2	1	0.5
F Use properties of lines and angles to determine angle measures.				
I Use angle properties in everyday situations.				
6-6 Angles and Parallel Lines	7.G.5	1	1	0.5
F Use properties of lines and angles to determine angle measures.				
6-7 Properties of Parallelograms	7.G.5	2	1	0.5
G Understand and use properties of parallelograms.				
QUIZ		0.5	0.5	0.25
6-8 The Triangle-Sum Property	7.G.5	1	1	0.5
D Use the Triangle-Sum Property to find measures of angles.				
H Explain consequences of the Triangle-Sum Property.				
6-9 Calculating the Distance Between Points	Anticipates 8.G.8	1	1	0.5
K Calculate the distance between two points on the coordinate plane.				
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	Chapter Review	2	1	1
	Test	1	1	0.5
	Total	17	13	7

Chapter 7: Multiplication in Geometry

Chapter Overview	Common Core State Standards	Pacing (in days)		
		Average	Advanced	Block
7-1 The Area Model for Multiplication **A** Find the area of a triangle given appropriate dimensions. **B** Find the area of a trapezoid (including special types) given appropriate dimensions. **E** Recognize and use the Distributive Property and the Commutative and Associative Properties of Multiplication. **F** Recognize the differences between perimeter and area. **G** Find areas of rectangles and the number of elements in rectangular arrays in applied situations. **K** Picture multiplication using arrays or area.	**7.NS.2, 7.G.6**	**1.5**	**1**	**0.5**
7-2 Multiplication of Fractions **C** Multiply fractions. **K** Picture multiplication using arrays or area.	**7.NS.2, 7.NS2a**	**1**	**1**	**0.5**
7-3 The Distributive Property **E** Recognize and use the Distributive Property and the Commutative and Associative Properties of Multiplication. **L** Represent the Distributive Property with areas of rectangles.	**7.NS.2a**	**1**	**1**	**0.5**
QUIZ		**0.5**	**0.5**	**0.25**
7-4 The Area of a Triangle **A** Find the area of a triangle given appropriate dimensions. **H** Find areas of triangles or trapezoids in real situations.	**7.G.6; (also reviews 6.G.1)**	**1**	**1**	**0.5**
7-5 The Area of a Trapezoid **B** Find the area of a trapezoid (including special types) given appropriate dimensions. **H** Find areas of triangles or trapezoids in real situations.	**7.G.6; (also reviews 6.G.1)**	**1**	**1**	**0.5**
7-6 Circles **D** Find the area and circumference of a circle. **F** Recognize the differences between perimeter and area. **I** Find the area and circumference of a circle in real-world situations.	**7.NS.4**	**1.5**	**1**	**0.5**
QUIZ		**0.5**	**0.5**	**0.25**
7-7 The Size-Change Model for Multiplication **J** Apply the Size-Change Model for Multiplication in real-world situations. **M** Perform expansions or contractions on a coordinate graph.	**Anticipates 8.G.3, 8.G.4**	**1**	**1**	**0.5**
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	Chapter Review	**2**	**1**	**1**
	Test	**1**	**1**	**0.5**
	Total	**13**	**11**	**6**

Chapter 8: Multiplication in Algebra

Chapter Overview	Common Core State Standards	Pacing (in days)		
		Average	Advanced	Block
8-1 Multiplication as Shortcut Addition **D** Recognize and use the Repeated Addition Property of Multiplication and the Multiplication Properties of 1, 0, -1, and positive and negative numbers .	**7.NS.2, 7.NS2a, 7.NS.3, 7.EE.1, 7.EE.3**	1	1	0.5
8-2 The Rate-Factor Model for Multiplication **F** Apply the Rate-Factor Model for Multiplication.	**7.NS.2, 7.NS.2a, 7.NS.3**	1	1	0.5
8-3 Multiplication with Negative Numbers **A** Multiply positive and negative numbers. **D** Recognize and use the Repeated Addition Property of Multiplication and the Multiplication Properties of 1, 0, -1, and positive and negative numbers. **K** Perform expansions or contractions with negative magnitudes on a coordinate graph.	**7.NS.2, 7.NS.2a, 7.NS.3**	1	1	0.5
QUIZ		0.5	0.5	0.25
8-4 Multiplying Probabilities **J** Calculate probabilities of independent events.	**7.SP.8, 7.SP.8a, 7.SP.8c**	1	1	0.5
8-4A* Predictions in Situations with Repeated Trials **S1** Understand that the probability of a chance event is a number between 0 and 1 that expresses the likelihood of the event occurring. Larger numbers indicate greater likelihood. A probability near 0 indicates an unlikely event, a probability around 1/2 indicates an event that is neither unlikely nor likely, and a probability near 1 indicates a likely event. **S2** 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. **S3** 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. **S4** Develop a probability model (which may not be uniform) by observing frequencies in data generated from a chance process.	**7.SP.5, 7.SP.6, 7.SP.7, 7.SP.7b**	1	1	0.5
8-5 Combining Percents **I** Answer questions involving percents and combined percents.	**7.RP.3**	1	1	0.5
8-6 Solving $ax = b$ **B** Solve and check equations of the form $ax = b$ and $ax + b = c$. **E** Recognize and use the Multiplication Properties of Equality and Inequality. **G** Find unknowns in real situations involving multiplication.	**7.EE.4**	1	1	0.5
QUIZ		0.5	0.5	0.25
8-7 Graphing $y = ax + b$ **L** Graph equations of the form $y = ax + b$	**7.EE.4, 7.EE.4a, Anticipates A-CED.2**	1	1	0.5
8-8 Solving $ax + b = c$ **B** Solve and check equations of the form $ax = b$ and $ax + b = c$.	**7.EE.4, 7.EE.4a**	2	1	0.5
8-9 Solving $ax + b < c$ **C** Solve and check inequalities of the form $ax + b < c$. **E** Recognize and use the Multiplication Properties of Equality and Inequality. **H** Solve inequalities arising from real situations.	**7.EE.4, 7.EE.4b**	1	1	0.5
* Available online.	**Self-Test**	1	1	0.5
	Chapter Review	2	1	1
	Test	1	1	0.5
	Total	16	14	7.5

Chapter 9: Patterns Leading to Division

Chapter Overview	Common Core State Standards	Pacing *(in days)*		
		Average	Advanced	Block
9-1 Integer Division 　**G** Use integer division in real situations.	**7.NS.2, 7.NS.2b, 7.NS.3, 7.EE.3**	1	1	0.5
9-2 The Rate Model for Division 　**H** Use the Rate Model for Division.	**7.NS.2, 7.NS.3, 7.RP.2b**	2	1	0.5
9-3 Division of Fractions 　**A** Divide fractions with numbers or variables.	**7.RP.1, 7.NS.2, 7.NS.2b, 7.NS.3, 7.EE.3**	1	1	0.5
9-4 Division of Negative Numbers 　**B** Divide positive and negative numbers. 　**D** Know related facts of multiplication and division. 　**F** Know the general properties for dividing positive and negative numbers. 　**K** Represent multiplication and division related facts with a fact triangle.	**7.NS.2b, 7.NS.3**	2	1	0.5
QUIZ		0.5	0.5	0.25
9-5 Division in Equations and Inequalities 　**C** Solve equations and inequalities using the Division Property of Equality and the Division Property of Inequality.	**7.NS.2c**	1	1	0.5
9-6 The Ratio-Comparison Model for Division 　**I** Use the Ratio-Comparison Model for Division.	**7.RP.2.3**	1	1	0.5
9-7 Proportions 　**E** Recognize the Means-Extremes Property and know why it works. 　**J** Recognize and solve problems involving proportions in real-world situations.	**7.RP.2a, 7.RP.2b, 7.RP.2c**	2	1	0.5
9-8 Proportional Thinking 　**J** Recognize and solve problems involving proportions in real-world situations.	**7.RP.2a, 7.RP.2c**	1	1	0.5
QUIZ		0.5	0.5	0.25
9-9 Proportions in Similar Figures 　**L** Find missing lengths in similar figures.	**7.G.1**	1	1	0.5
9-9A* Graphing Proportional Relationships 　**S** Explain what a point (x, y) on the graph of a proportional relationship means in terms of the situation, with special attention to the points $(0, 0)$ and $(1, r)$ where r is the unit rate.	**7.RP.2d**			
	Self-Test	1	1	0.5
	Chapter Review	2	1	1
	Test	1	1	0.5
	Total	17	13	7

* Available online.

Chapter 10: Linear Equations and Inequalities

Chapter Overview	Common Core State Standards	Pacing *(in days)*		
		Average	Advanced	Block
10-1 Finding Solutions Using Graphs **C** Translate situations of constant increase or decrease that lead to sentences of the form $ax + b = cx + d$ or $ax + b < cx + d$.	**7.EE.3, 7.EE.4, Anticipates 8.EE.8a**	1	1	0.5
10-2 Solving $ax + b = cx + d$ **A** Solve equations of the form $ax + b = cx + d$. **C** Translate situations of constant increase or decrease that lead to sentences of the form $ax + b = cx + d$ or $ax + b < cx + d$.	**7.EE.1, 7.EE.4, 7.EE.4a**	1	1	0.5
10-3 Graphing $y < ax + b$ **E** Graph inequalities of the form $y < ax + b$.	**7.EE.4, 7.EE.4b**	1	1	0.5
QUIZ		0.5	0.5	0.25
10-4 Solving $ax + b < cx + d$ **B** Solve inequalities of the form $ax + b < cx + d$. **C** Translate situations of constant increase or decrease that lead to sentences of the form $ax + b = cx + d$ or $ax + b < cx + d$.	**7.EE.4, 7.EE.4b**	1	1	0.5
10-5 Linear Combinations **D** Translate situations of linear combinations that lead to sentences of the form $Ax + By = C$ and $Ax + By < C$.	**7.EE.1, 7.EE.4, 7.EE.4b**	1.5	1	0.5
10-6 Graphing $Ax + By = C$ and $Ax + By < C$ **F** Graph sentences of the form $ax + by = c$ and $ax + by < c$.	**7.EE.4, 7.EE.4b**	1	1	0.5
QUIZ		0.5	0.5	0.25
10-7 Time-Distance Graphs **G** Graph situations involving time and distance.	**Anticipates 8.F.5**	1	1	0.5
10-8 Graphs of Formulas **H** Graph a formula.	**Anticipates 8.F.3, 8.F.5**	1	1	0.5

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	Average	Advanced	Block
Self-Test	1	1	0.5
Chapter Review	2	1	1
Test	1	1	0.5
Total	13.5	12	6.5

Chapter 11: Geometry in Space

Chapter Overview	Common Core State Standards	Pacing *(in days)*		
		Average	Advanced	Block
11-1 Lines and Planes in Space	Reviews 4.G.1	1	1	0.5
C Apply properties of planes.				
11-2 Depicting 3-Dimensional Figures on a Plane	7.G.6	1	1	0.5
D Apply the properties of prisms.				
11-3 2-Dimensional Nets for 3-Dimensional Shapes	Reviews 6.G.4	1	1	0.5
K Draw and identify nets of prisms and cylinders.				
11-4 2-Dimensional Views of 3-Dimensional Figures	Anticipates G-GMD	1	1	0.5
E From 2-dimensional views of a figure, determine properties of the 3-dimensional figure.				
L Give views of a figure from the top, sides, or front.				
QUIZ		0.5	0.5	0.25
11-5 The Surface Area and Volume of a Box	7.G.5	1	1	0.5
A Find the surface area and volume of cylinders and prisms.				
G Find the volume and surface area of a rectangular solid in real-world situations.				
11-6 Surface Areas of Prisms and Cylinders	7.G.5	1	1	0.5
A Find the surface area and volume of cylinders and prisms.				
H Find the volume and surface area of cylinders and prisms in real-world situations.				
11-7 Volumes of Prisms and Cylinders	7.G.3, 7.G.5	1	1	0.5
A Find the surface area and volume of cylinders and prisms.				
H Find the volume and surface area of cylinders and prisms in real-world situations.				
11-8 Spheres	Anticipates 8.G.9	1	1	0.5
B Calculate the surface area and volume of a sphere.				
I Use the formulas for the surface area and volume of a sphere in real-world situations.				
QUIZ		0.5	0.5	0.25
11-9 How Changing Dimensions Affects Area	7.G.6	1	1	0.5
F Use the relationship among sides, areas, and volumes of similar figures to predict length, perimeter, area, and volume.				
J Use relationships among sides, areas, and volumes of similar figures in real-world situations.				
11-10 How Changing Dimensions Affects Volume	7.G.6	1	1	0.5
F Use the relationship among sides, areas, and volumes of similar figures to predict length, perimeter, area, and volume.				
J Use relationships among sides, areas, and volumes of similar figures in real-world situations.				

The lessons in *Transition Mathematics* that **review** the Common Core State Standards (CCSS) from prior years exist because teachers have told us that these are ideas on which their students need work, either because an earlier teacher did not cover the material, because they have forgotten what they have learned, or because the lesson contains ideas that typically require more than one pass. This material may be skimmed or skipped in classes of Advanced students. The lessons that **anticipate** CCSS from later years typically require more than one pass or are prerequisites for other material to be seen later. These lessons should not be skipped.

	Average	Advanced	Block
Self-Test	1	1	0.5
Chapter Review	2	1	0.5
Test	1	1	0.5
Total	15	14	7

Chapter 12: Statistics and Variability

Chapter Overview	Common Core State Standards	Pacing (in days)		
		Average	Advanced	Block
12-1 Representing Categorical Data **E** Interpret information displayed in bar graphs, circle graphs, histograms, and stem-and-leaf displays.	**7.SP.1, 7.SP.2, 7.SP.3**	1	1	0.5
12-2 Histograms and Stem-and-Leaf Plots **E** Interpret information displayed in bar graphs, circle graphs, histograms, and stem-and-leaf displays. **I** Represent numerical data in a stem-and-leaf display. **J** Represent numerical data in a histogram.	**7.SP.1, 7.SP.2, 7.SP.4**	1	1	0.5
12-3 Properties of the Mean **D** Apply the Means and Sums Property and the Balance Property of the Mean. **F** Use the properties of means to find values in real-world situations.	**7.SP.1, 7.SP.2, 7.SP.4**	1	1	0.5
QUIZ		0.5	0.5	0.25
12-4 Deviations from the Mean **A** Calculate the mean absolute deviation of a set of numbers.	**7.SP.1, 7.SP.4**	1	1	0.5
12-5 Medians and Box Plots **B** Calculate the five-number summary of a distribution of numbers. **K** Draw and interpret a box plot of given data.	**7.SP.1, 7.SP.4**	1	1	0.5
12-6 Describing Tolerance **C** Write intervals using double inequalities, the ± sign, and absolute value. **H** Use tolerance to determine the interval of a measurement that is based on measures that are themselves in an interval.	**Anticipates N.Q.3**	1	1	0.5
QUIZ		0.5	0.5	0.25
12-7 Time Series **G** Use rates of change to understand how data vary over time and to make predictions. **L** Represent trends in data over time.	**Anticipates S.ID.5**	1	1	0.5
The lessons in *Transition Mathematics* that **anticipate** CCSS from later years typically require more than one pass or are prerequisites for other material to be seen later. These lessons should not be skipped.	**Self-Test**	1	1	0.5
	Chapter Review	1.5	1	1
	Test	1	1	0.5
	Total	11.5	11	6