

PACING FOR A COMMON CORE CURRICULUM

PRENTICE HALL ALGEBRA READINESS

This Pacing Chart is provided to help you plan your course as you look to implement the Common Core State Standards with *Prentice Hall Algebra Readiness* in your math classroom. The Chart indicates the CC standard(s) that each lesson addresses and proposes pacing for each topic. Included in the chart are supplemental Common Core Lessons that offer in-depth coverage of certain standards. These lessons, in addition to the lessons in the Student Edition, provide complete coverage of all of the Common Core State Standards for Grade 8.

The suggested number of days for each chapter is based on a traditional 45-minute class period and on a 90-minute block period. The total of 138 days of instruction leaves time for review and enrichment lessons, activity labs, assessments, and projects.

- ✓ Content to meet the Grade 8 Common Core State Standards.
- ✓ Review and Intervention for mastery of prior standards
- ✓ Content for Enrichment to prepare for future study

		Standards of Mathematical Content	Differentiated Instruction	
			Core	Advanced
Chapter 1 Algebraic Expressions and Integers		Traditional 8 days Block 4 days		
1-1	Variables and Expressions	Reviews 6.EE.2, 6.EE.2.c, 6.EE.6	✓	
1-2	The Order of Operations	Reviews 6.EE.2, 6.EE.2.b	✓	
1-3	Writing and Evaluating Expressions	Reviews 6.EE.2, 6.EE.2.a, 6.EE.2.b, 6.EE.6	✓	
1-4	Integers and Absolute Value	Reviews 6.NS.5, 6.NS.6, 6.NS.6.a, 6.NS.6.c, 6.NS.7, 6.NS.7.c	✓	
1-5	Adding Integers	Reviews 7.NS.1, 7.NS.1.a, 7.NS.1.b, 7.NS.1.c, 7.NS.1.d	✓	✓
1-6	Subtracting Integers	Reviews 7.NS.1, 7.NS.1.a, 7.NS.1.b, 7.NS.1.c, 7.NS.1.d	✓	✓
1-7	Inductive Reasoning	Mathematical Practices	✓	✓
1-8	Reasoning Strategy: Looking for a Pattern	Mathematical Practices	✓	✓
1-9	Multiplying and Dividing Integers	Reviews 7.NS.2, 7.NS.2.a, 7.NS.2.b, 7.NS.3	✓	✓
1-10	The Coordinate Plane	Reviews 6.NS.6, 6.NS.6.b, 6.NS.6.c, 6.NS.8	✓	
Chapter 2 Solving One-Step Equations and Inequalities		Traditional 10 days Block 5 days		
2-1	Properties of Numbers	Reviews 6.EE.2, 6.EE.2.b	✓	
2-2	The Distributive Property	Reviews 6.EE.2, 6.EE.2.b	✓	
2-3	Simplifying Variable Expressions	Reviews 6.EE.2, 6.EE.2.b	✓	
2-4	Variables and Expressions	Reviews 6.EE.2, 6.EE.2.b	✓	
2-5	Solving Equations by Adding or Subtracting	8.EE.7, 8.EE.7.a	✓	✓
2-6	Solving Equations by Multiplying or Dividing	8.EE.7, 8.EE.7.a	✓	✓
2-7	Reasoning Strategy: Try, Test, Revise	Mathematical Practices	✓	✓

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2-8	Inequalities and Their Graphs	Reviews 6.EE.5, 6.EE.6, 6.EE.8	✓	
2-9	Solving One-Step Inequalities by Adding or Subtracting	Reviews 6.EE.5, 6.EE.6	✓	
2-10	Solving One-Step Inequalities by Multiplying or Dividing	Reviews 6.EE.5, 6.EE.6	✓	
Chapter 3 Decimals and Equations		Traditional 8 days		
		Block 4 days		
3-1	Rounding and Estimating	Reviews 5.NF.2	✓	
3-2	Estimating Decimal Products and Quotients	Reviews 6.NS.3	✓	
3-3	Using Formulas	Reviews 6.EE.2.c	✓	
3-4	Solving Equations by Adding or Subtracting Decimals	Reviews 6.EE.5, 6.EE.6	✓	
3-5	Solving Equations by Multiplying or Dividing Decimals	Reviews 6.EE.5, 6.EE.6	✓	
3-6	Using the Metric System	Reviews 5.MD.1	✓	
3-7	Reasoning Strategy: Act It Out	Mathematical Practices	✓	✓
Chapter 4 Factors, Fractions, and Exponents		Traditional 10 days		
		Block 5 days		
4-1	Divisibility and Factors	Reviews 4.OA.4	✓	
4-2	Exponents	Reviews 6.EE.1, 6.EE.2, 6.EE.2.c	✓	
4-3	Prime Factorization and Greatest Common Divisor	Reviews 6.EE.5, 6.EE.6	✓	
4-4	Simplifying Fractions	Reviews 4.NF.1	✓	
4-5	Reasoning Strategy: Solve a Simpler Problem	Mathematical Practices	✓	✓
4-6	Rational Numbers	8.NS.1	✓	✓
4-7	Exponents and Multiplication	8.EE.1	✓	✓
4-8	Exponents and Division	8.EE.1	✓	✓
4-9	Scientific Notation	8.EE.3, 8.EE.4	✓	✓
Chapter 5 Operations With Fractions		Traditional 8 days		
		Block 4 days		
5-1	Comparing and Ordering Rational Numbers	Reviews 4.NF.2	✓	
5-2	Fractions and Decimals	Reviews 7.NS.2.d, 7.EE.3	✓	✓
5-3	Adding and Subtracting Fractions	Reviews 5.NF.1	✓	
5-4	Multiplying and Dividing Fractions	Reviews 5.NF.4.a, 6.NS.1	✓	
5-5	Using Customary Units of Measurement	Reviews 5.MD.1	✓	
5-6	Reasoning Strategy: Work Backward	Mathematical Practices	✓	✓
5-7	Solving Equations by Adding or Subtracting Fractions	Reviews 6.EE.7	✓	
5-8	Solving Equations by Multiplying Fractions	Reviews 6.EE.7	✓	
5-9	Powers of Products and Quotients	Prepares for A-SSE.3		✓
Chapter 6 Ratios, Proportions, and Percents		Traditional 12 days		
		Block 6 days		
6-1	Ratios and Unit Rates	Reviews 7.RP.1	✓	✓
6-2	Proportions	Reviews 7.RP.2, 7.RP.2.a, 7.RP.2.b	✓	✓
6-3	Similar Figures and Scale Drawings	Reviews 7.RP.1, 7.RP.2, 7.G.1	✓	✓
6-4	Fractions, Decimals, and Percents	Reviews 7.EE.3	✓	✓
6-5	Proportions and Percents	Reviews 7.EE.3	✓	✓
6-6	Percents and Equations	Reviews 7.EE.3	✓	✓

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6-7	Percent of Change	Reviews 7.RP.3, 7.EE.3	✓	✓
6-8	Markup and Discount	Reviews 7.RP.3, 7.EE.3	✓	✓
6-9	Applications of Rational Numbers	Reviews 7.EE.3	✓	✓
6-10	Reasoning Strategy: Make a Table	Mathematical Practices	✓	✓
Chapter 7 Solving Equations and Inequalities		Traditional 12 days		
		Block 6 days		
7-1	Solving Two-Step Equations	8.EE.7, 8.EE.7.a	✓	✓
7-2	Solving Multi-Step Equations	8.EE.7, 8.EE.7.a, 8.EE.7.b	✓	✓
CC-1	Types of Solutions of Linear Equations	8.EE.7.a	✓	✓
7-3	Two-Step Equations With Fractions and Decimals	Reviews 7.EE.4.a	✓	✓
7-4	Reasoning Strategy: Write an Equation	Mathematical Practices	✓	✓
7-5	Solving Two-Step Inequalities	Reviews 7.EE.4.b	✓	✓
7-6	Transforming Formulas	Reviews 7.EE.2	✓	✓
7-7	Simple and Compound Interest	Reviews 7.RP.3	✓	✓
Chapter 8 Linear Functions and Graphing		Traditional 20 days		
		Block 10 days		
8-1	Relations and Functions	8.F.1, 8.F.2	✓	✓
8-2	Equations With Two Variables	8.F.4	✓	✓
8-3	Slope and y-Intercept	8.EE.6, 8.F.3, 8.F.4	✓	✓
CC-2	Comparing Functions	8.F.2	✓	✓
CC-3	Describing Functions	8.F.5	✓	✓
CC-4	Slope and Similar Triangles	8.EE.6	✓	✓
8-4	Direct Variation	8.EE.5, 8.F.4	✓	✓
CC-5	Graphing Proportional Relationships	8.EE.5	✓	✓
8-5	Reasoning Strategy: Use Multiple Strategies	Mathematical Practices	✓	✓
8-6	Solving Systems of Linear Equations	8.EE.8, 8.EE.8.a, 8.EE.8.b, 8.EE.8.c	✓	✓
CC-6	Solving Systems of Equations	8.EE.8, 8.EE.8.a, 8.EE.8.b, 8.EE.8.c	✓	✓
8-7	Linear Inequalities	Prepares for A-REI.12		✓
Chapter 9 Spatial Thinking		Traditional 16 days		
		Block 8 days		
9-1	Introduction to Geometry: Points, Lines, and Planes	Reviews 4.G.1	✓	
9-2	Angle Relationships and Parallel Lines	8.G.5	✓	✓
9-3	Classifying Polygons	8.G.5	✓	✓
9-4	Reasoning Strategy: Draw a Diagram	Mathematical Practices	✓	✓
9-5	Congruence	8.G.2	✓	✓
9-6	Circles	Reviews 6.EE.2, 6.EE.2.c	✓	
9-7	Constructions	Prepares for G-CO.12, G-CO.13		✓
9-8	Translations	8.G.1, 8.G.1.a, 8.G.1.b, 8.G.1.c, 8.G.2, 8.G.3	✓	✓
9-9	Symmetry and Reflections	8.G.1, 8.G.1.a, 8.G.1.b, 8.G.1.c, 8.G.2, 8.G.3	✓	✓
9-10	Rotations	8.G.1, 8.G.1.a, 8.G.1.b, 8.G.1.c, 8.G.2, 8.G.3	✓	✓

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CC-7	Transformations and Congruency	8.G.1, 8.G.1.a, 8.G.1.b, 8.G.1.c, 8.G.2	✓	✓
CC-8	Transformations and Similarity	8.G.4, 8.G.5	✓	✓
Chapter 10 Area and Volume		Traditional 10 days Block 5 days		
10-1	Area: Parallelograms	Reviews 7.G.6	✓	✓
10-2	Area: Triangles and Trapezoids	Reviews 7.G.6	✓	✓
10-3	Area: Circles	Reviews 7.G.4	✓	✓
10-4	Space Figures	Reviews 5.MD.5.a	✓	
10-5	Surface Area: Prisms and Cylinders	Reviews 6.G.4	✓	
10-6	Surface Area: Pyramids, Cones, and Spheres	Reviews 6.G.4	✓	
10-7	Volume: Prisms and Cylinders	8.G.9	✓	✓
10-8	Reasoning Strategy: Make a Model	Mathematical Practices	✓	✓
10-9	Volume: Pyramids, Cones, and Spheres	8.G.9	✓	✓
10-10	Scale Factors and Solids			✓
Chapter 11 Irrational Numbers and Nonlinear Functions		Traditional 14 days Block 7 days		
11-1	Square Roots and Irrational Numbers	8.NS.2, 8.EE.2	✓	✓
CC-9	Cube Roots	8.EE.2	✓	✓
11-2	The Pythagorean Theorem	8.EE.2, 8.G.6, 8.G.7	✓	✓
CC-10	Pythagorean Proofs	8.G.6	✓	✓
CC-11	Using the Pythagorean Theorem With Three-Dimensional Figures	8.G.7	✓	✓
11-3	Distance and Midpoint Formulas	8.G.8	✓	✓
11-4	Reasoning Strategy: Write a Proportion	Mathematical Practices	✓	✓
11-5	Graphing Nonlinear Functions	8.F.3	✓	✓
Chapter 12 Data Analysis		Traditional 10 days Block 5 days		
12-1	Mean, Median, and Mode	Reviews 6.SP.3, 6.SP.5, 6.SP.5.c	✓	
12-2	Frequency Tables, Line Plots, and Histograms	Reviews 6.SP.4	✓	
12-3	Box-and-Whisker Plots	Reviews 6.SP.4	✓	
12-4	Stem-and-Leaf Plots	Reviews 6.SP.5, 6.SP.5.b	✓	
12-5	Scatter Plots	8.SP.1	✓	✓
CC-12	Exploring Bivariate Data	8.SP.1	✓	✓
CC-13	Modeling Data With Lines	8.SP.2, 8.SP.3	✓	✓
CC-14	Relative Frequency	8.SP.4	✓	✓
12-6	Reasoning Strategy: Solve by Graphing	Mathematical Practices	✓	✓