All Dimensions Math 7 lessons are considered essential and are important to teach at this grade level based on the Dimensions Math sequence, Common Core State Standards, mastery of prerequisite skills, and readiness for Dimensions Math 8. For students who have successfully completed Dimensions Math 6, the Notes section identifies lessons in Dimensions Math 7 that may be omitted or used as review.

This Pacing Guide focuses on content from the Textbook. The Workbook is for additional practice when needed. The Basic Practice and Further Practice sections in the Workbook may also serve as a source of assessment problems.

Dimensions Math 7 provides opportunities for students to apply their learning through higher-level thinking and enrichment problems. These include the BrainWorks and Extend Your Learning Curve problems in the Textbook, as well as the Challenging Practice and Enrichment problems in the Workbook. While these problems are not considered essential and are not included in this Pacing Guide, they are worth exploring to deepen problem-solving skills and practice higher-order thinking.

This guide also highlights Pre-algebra content in Dimensions Math 7. Students who complete Dimensions Math 6, 7, and 8 will be prepared to enter a Geometry or Algebra 2 course. Pre-algebra, Algebra, and Geometry readiness skills are integrated throughout the Dimensions Math 6 to 8 sequence.

For more detailed information on state standards alignment, refer to the Dimensions Math 6-8 Common Core Alignments.

For a more in-depth look at what is covered in each chapter, refer to the Dimensions Math 6-8 Scopes and Sequences.

Chapter 1: Factors and Multiples	Pacing	Class Periods	Pre-algebra Content	Notes
1.1 Factors and Multiples 1.2 Prime Factorization and Exponential Notation 1.3 Greatest Common Factor (GCF) 1.4 Least Common Multiple (LCM) 1.5 Square Roots and Cube Roots Review Exercise 1	Month 1	4 – 11	1.3 1.4	If students mastered content from DM 6A and have demonstrated fluency with factors and multiples, 1.1, 1.3, and 1.4 could be omitted or used as review. The lower number of class periods reflects the omitted lessons. Content meets or exceeds Common Core State Standards for Math for Grade 7.

Chapter 2: Real Numbers	Pacing	Class Periods	Pre-algebra Content	Notes
2.1 Idea of Negative Numbers and the Number Line 2.2 Addition and Additive Inverse 2.3 Subtraction as Absolute Value of the Difference 2.4 Multiplication, Division, and Combined Operations of Integers 2.5 Rational Numbers 2.6 Real Numbers and Use of Calculators 2.7 Rounding Numbers to Decimal Places Review Exercise 2	Months 1 - 2	14 – 17	2.1 2.2 2.3 2.4 2.5 2.6	If students mastered content from DM 6A and have demonstrated an understanding of negative numbers, the number line, and finding absolute value, 2.1 could be omitted or used as review. The lower number of Class Periods reflects the omitted lessons. The focus of instruction of 2.6 is converting rational numbers to decimals and understanding their patterns, not on calculator use. For that reason, 2.6B may be used as a practice lesson for identifying those patterns, if needed. If students mastered content from DM 4A and 5A and have demonstrated an understanding of rounding whole numbers and decimals, 2.7 could be omitted or used as review. Content meets or exceeds Common Core State Standards for Math for Grade 7.

Chapter 3: Introduction to Algebra	Pacing	Class Periods	Pre-algebra Content	Notes
3.1 The Use of Letters 3.2 Evaluation of Algebraic Expressions and Formulas 3.3 Writing Algebraic Expressions to Represent Real-world Situations Review Exercise 3	Month 2	7 – 8	All	If students mastered content from DM 6A and have demonstrated an understanding of the use of letters and basic notation of expressions, 3.1A and 3.1B could be used as review. Content meets or exceeds Common Core State Standards for Math for Grade 7.

Chapter 4: Algebraic Manipulation	Pacing	Class Periods	Pre-algebra Content	Notes
4.1 Like Terms and Unlike Terms 4.2 Distributive Law, Addition and Subtraction of Linear Algebraic Expressions 4.3 Simplification of Linear Algebraic Expressions 4.4 Factorization by Extracting Common Factors 4.5 Factorization by Grouping Terms Review Exercise 4	Months 2 – 3	9 –10	All	Content meets or exceeds Common Core State Standards for Math for Grade 7.

Chapter 5: Simple Equations in One Variable	Pacing	Class Periods	Pre-algebra Content	Notes
5.1 Simple Linear Equations in One Variable 5.2 Equations Involving Parentheses 5.3 Simple Fractional Equations 5.4 Forming Linear Equations to Solve Problems Review Exercise 5	Month 3	7 - 8	All	Content meets or exceeds Common Core State Standards for Math for Grade 7.

Chapter 6: Ratio, Rate and Speed	Pacing	Class Periods	Pre-algebra Content	Notes
6.1 Ratios Involving Rational Numbers 6.2 Average Rate 6.3 Speed Review Exercise 6	Months 3 – 4	3 – 9	All	If students mastered content from DM 6A and have demonstrated an understanding of ratio, rate, and speed, the majority of Chapter 6 could be omitted or used as review, with the exception of 6.3B which introduces new content. The lower number of class periods reflects the omitted lessons. Content meets or exceeds Common Core State Standards for Math for Grade 7.

Chapter 7: Percent	**Pacing**	**Class Periods**	**Pre-algebra Content**	**Notes**
7.1 Meaning of Percentage 7.2 Reverse Percentages 7.3 Percentage Increase and Decrease 7.4 Discount and Sales Tax Review Exercise 7	Month 4	9 – 10	All	If students mastered content from DM 6A and have demonstrated an understanding of the meaning of percentage and expressing a fraction as a percent, 7.1A could be omitted or used as review. Content meets or exceeds Common Core State Standards for Math for Grade 7.

Chapter 8: Angles, Triangles, and Quadrilaterals	**Pacing**	**Class Periods**	**Pre-algebra Content**	**Notes**
8.1 Points, Lines, and Planes 8.2 Angles 8.3 Perpendicular Bisectors and Angle Bisectors 8.4 Triangles 8.5 Quadrilaterals Review Exercise 8	Months 4 – 5	12 – 13	All	Content meets or exceeds Common Core State Standards for Math for Grade 7.

Chapter 9: Number Patterns	**Pacing**	**Class Periods**	**Pre-algebra Content**	**Notes**
9.1 Number Patterns and Sequences 9.2 General Term of a Sequence Review Exercise 9	Month 5	6 – 7	All	Content meets or exceeds Common Core State Standards for Math for Grade 7.

Chapter 10: Coordinate and Linear Graphs	**Pacing**	**Class Periods**	**Pre-algebra Content**	**Notes**
10.1 The Coordinate Plane 10.2 Distance between Coordinate Pairs 10.3 Changes in Quantities	Month 7	11 – 12	10.1 10.2 10.3	Content meets or exceeds Common Core State Standards for Math for Grade 6.

Chapter 11: Inequalities	**Pacing**	**Class Periods**	**Pre-algebra Content**	**Notes**
11.1 Solving Simple Inequalities 11.2 More Properties of Inequalities 11.3 Simple Linear Inequalities 11.4 Applications of Simple Inequalities Review Exercise 11	Month 6	9 – 10	All	Content meets or exceeds Common Core State Standards for Math for Grade 7.

Chapter 12: Perimeters and Areas of Plane Figures	**Pacing**	**Class Periods**	**Pre-algebra Content**	**Notes**
12.1 Perimeters and Areas of a Square, a Rectangle, and a Triangle 12.2 Circumference and Area of a Circle 12.3 Area of a Parallelogram 12.4 Area of a Trapezoid 12.5 Perimeters and Areas of Composite Plane Figures Review Exercise 12	Months 6 – 7	10 – 12	All	If students mastered content from DM 6B, and have demonstrated an understanding of finding area of plane figures, 12.1 could be used as review. Content meets or exceeds Common Core State Standards for Math for Grade 7.

Chapter 13: Volume and Surface Area of Solids	Pacing	Class Periods	Pre-algebra Content	Notes
13.1 Volumes and Total Surface Areas of a Cube and a Cuboid 13.2 Volume and Total Surface Area of a Prism 13.3 Volumes and Surface Areas of Composite Solids Review Exercise 13	Month 7	4 – 8	All	If students mastered content from DM 6B, and have demonstrated an understanding of finding volume and surface area of a cube, a cuboid, and a prism, 13.1 and 13.2 could be omitted or used as review. The lower number of Class Periods reflects the omitted lessons. Content meets or exceeds Common Core State Standards for Math for Grade 7.

Chapter 14: Proportions	Pacing	Class Periods	Pre-algebra Content	Notes
14.1 Scale Drawings 14.2 Map Scale and Calculation of Area 14.3 Direct Proportion 14.4 Inverse Proportion Review Exercise 14	Months 7 – 8	9 – 10	All	Content meets Common Core State Standards for Math for Grade 7.

Chapter 15: Data Handling	Pacing	Class Periods	Pre-algebra Content	Notes
15.1 Collection of Data 15.2 Dot Plots 15.3 Measure of Center: Mean 15.4 Measure of Center: Median 15.5 Mode Review Exercise 15	Month 8	10 – 12	All	If students mastered content from DM 6B, and have demonstrated an understanding of dot plots, 15.2 could be used as review. Content meets or exceeds Common Core State Standards for Math for Grade 7.

Chapter 16: Probability of Simple Events	Pacing	Class Periods	Pre-algebra Content	Notes
16.1 Set Notation 16.2 The Meaning of Probability 16.3 Sample Space Review Exercise 16	Months 8 – 9	8 – 9	All	Content meets or exceeds Common Core State Standards for Math for Grade 7.

Chapter 17: Probability of Combined Events	**Pacing**	**Class Periods**	**Pre-algebra Content**	**Notes**
17.1 Probability of Simple and Combined Events 17.2 Mutually Exclusive Events 17.3 Independent Events 17.4 Further Probabilities Review Exercise 17	Month 9	10 – 11	All	Content meets or exceeds Common Core State Standards for Math for Grade 7.