Welcome, Educators!

As you plan for this year, we hope that *Math in Focus*® and the Singapore Math® approach will provide effective strategies for focusing and differentiating instruction. The framework below is designed to help you focus your planning.

Using the Essential Content Framework
To move forward this fall, we recommend beginning with the content from the current grade. Review this framework against your school's and state's specific goals, and in collaboration with administrators and your colleagues across grades, to determine where you want to add new content or prior-year review.

As you reach the priority topics shown below, as well as the topics that address your specific priorities, you may want to reinforce prerequisite knowledge. The Prior Learning column (Grades 1 and up) suggests where you can find support from the grade before. If the third column is empty, it means that students learned the prerequisites earlier this grade, or several grades in the past.

When you reach content that is *not* listed as priority content, you can take several paths to give students a targeted grounding:
- Combine some content from that section into a related priority section.
- Teach a mini-lesson on that topic, with the Learn activities and practice, possibly using learning stations.
- Use these topics to extend concepts within a related section.

Evaluating Readiness
We recommend using the Recall Prior Knowledge and Quick Check to get a sense of students' readiness for each chapter and to identify areas to dig into more deeply as you move through grade-level content. You can also administer chapter Pre-Tests; we recommend emphasizing the diagnostic and formative nature of these to provide the most supportive learning environment.

From Engagement to Mastery
Students should start with engaging, hands-on learning experiences to the greatest possible extent. Using the Concrete-Pictorial-Abstract (CPA) approach, you may want students to use physical math manipulatives throughout the lessons and as a strategic resource to solve non-routine problems. The goal is for students to grow as problem solvers and as mathematicians.

We look forward to supporting you on this worthwhile journey.

The *Math in Focus*® Team

Math in Focus © 2013 Grade 3

Priority standards were identified through Achieve the Core.*

Standards in *italics* were further selected by International Center for Leadership in Education.**

Grade 3 Section	Priority Standards	Prior Learning
Chapter 1 Numbers to 10,000		
1.1 Counting	Not identified as a priority standard. See teaching suggestions noted in the letter.	
1.2 Place Value	Not identified as a priority standard. See teaching suggestions noted in the letter.	
1.3 Comparing and Ordering Numbers	Not identified as a priority standard. See teaching suggestions noted in the letter.	
Chapter 2 Mental Math and Estimation		
2.1 Mental Addition	Not identified as a priority standard. See teaching suggestions noted in the letter.	
2.2 Mental Subtraction	Not identified as a priority standard. See teaching suggestions noted in the letter.	
2.3 More Mental Addition	Not identified as a priority standard. See teaching suggestions noted in the letter.	
2.4 Rounding Numbers to Estimate	*3.OA.D Solve problems involving the four operations, and identify and explain patterns in arithmetic.**	
2.5 Using Front-End Estimation	Not identified as a priority standard. See teaching suggestions noted in the letter.	
Chapter 3 Addition up to 10,000		
3.1 Addition Without Regrouping	Not identified as a priority standard. See teaching suggestions noted in the letter.	
3.2 Addition With Regrouping in Hundreds	Not identified as a priority standard. See teaching suggestions noted in the letter.	
3.3 Addition With Regrouping in Ones, Tens, and Hundreds	Not identified as a priority standard. See teaching suggestions noted in the letter.	
Chapter 4 Subtraction up to 10,000		
4.1 Subtraction Without Regrouping	Not identified as a priority standard. See teaching suggestions noted in the letter.	
4.2 Subtraction With Regrouping in Hundreds and Thousands	Not identified as a priority standard. See teaching suggestions noted in the letter.	
4.3 Subtraction With Regrouping in Ones, Tens, Hundreds, and Thousands	Not identified as a priority standard. See teaching suggestions noted in the letter.	
4.4 Subtraction Across Zeros	Not identified as a priority standard. See teaching suggestions noted in the letter.	

Grade 3 Section	Priority Standards	Prior Learning
Chapter 5 Using Bar Models: Addition and Subtraction		
5.1 Real-World Problems: Addition and Subtraction	3.OA.D Solve problems involving the four operations, and identify and explain patterns in arithmetic.	Grade 2 Section 4.1 Grade 2 Section 4.2 Grade 2 Section 4.3 Grade 2 Section 4.4
Chapter 6 Multiplication Tables of 6, 7, 8, and 9		
6.1 Multiplication Properties	3.OA.A Represent and solve problems involving multiplication and division. 3.OA.B Understand properties of multiplication and the relationship between multiplication and division. 3.OA.C Multiply and divide within 100.	Grade 2 Section 5.1
6.2 Multiply by 6	3.OA.A Represent and solve problems involving multiplication and division. 3.OA.B Understand properties of multiplication and the relationship between multiplication and division. 3.OA.C Multiply and divide within 100. 3.NBT.A Use place value understanding and properties of operations to perform multi-digit arithmetic.+	Grade 2 Section 6.1 Grade 2 Section 6.2 Grade 2 Section 6.3 Grade 2 Section 6.4 Grade 2 Section 6.5 Grade 2 Section 15.1 Grade 2 Section 15.2 Grade 2 Section 15.3 Grade 2 Section 15.4
6.3 Multiply by 7	3.OA.A Represent and solve problems involving multiplication and division. 3.OA.B Understand properties of multiplication and the relationship between multiplication and division. 3.OA.C Multiply and divide within 100. 3.NBT.A Use place value understanding and properties of operations to perform multi-digit arithmetic.+	Grade 2 Section 6.1 Grade 2 Section 6.2 Grade 2 Section 6.3 Grade 2 Section 6.4 Grade 2 Section 6.5 Grade 2 Section 15.1 Grade 2 Section 15.2 Grade 2 Section 15.3 Grade 2 Section 15.4
6.4 Multiply by 8	3.OA.A Represent and solve problems involving multiplication and division. 3.OA.B Understand properties of multiplication and the relationship between multiplication and division. 3.OA.C Multiply and divide within 100. 3.NBT.A Use place value understanding and properties of operations to perform multi-digit arithmetic.+	Grade 2 Section 6.1 Grade 2 Section 6.2 Grade 2 Section 6.3 Grade 2 Section 6.4 Grade 2 Section 6.5 Grade 2 Section 15.1 Grade 2 Section 15.2 Grade 2 Section 15.3 Grade 2 Section 15.4
6.5 Multiply by 9	3.OA.A Represent and solve problems involving multiplication and division. 3.OA.B Understand properties of multiplication and the relationship between multiplication and division.	Grade 2 Section 6.1 Grade 2 Section 6.2 Grade 2 Section 6.3 Grade 2 Section 6.4 Grade 2 Section 6.5

Grade 3 Section	Priority Standards	Prior Learning
	3.OA.C Multiply and divide within 100. *3.NBT.A Use place value understanding and properties of operations to perform multi-digit arithmetic.+*	*Grade 2 Section 15.1* *Grade 2 Section 15.2* *Grade 2 Section 15.3* *Grade 2 Section 15.4*
6.6 Division: Finding the Number of Items in Each Group	*3.OA.A Represent and solve problems involving multiplication and division.* *3.OA.B Understand properties of multiplication and the relationship between multiplication and division.* *3.OA.C Multiply and divide within 100.*	*Grade 2 Section 5.2* *Grade 2 Section 5.3*
6.7 Division: Making Equal Groups	*3.OA.A Represent and solve problems involving multiplication and division.* *3.OA.B Understand properties of multiplication and the relationship between multiplication and division.* *3.OA.C Multiply and divide within 100.*	*Grade 2 Section 5.2* *Grade 2 Section 5.3*
Chapter 7 Multiplication		
7.1 Mental Multiplication	*3.OA.A Represent and solve problems involving multiplication and division.* *3.OA.B Understand properties of multiplication and the relationship between multiplication and division.* *3.OA.C Multiply and divide within 100.* *3.NBT.A Use place value understanding and properties of operations to perform multi-digit arithmetic.+*	*Grade 2 Section 6.1* *Grade 2 Section 6.2* *Grade 2 Section 6.3* *Grade 2 Section 6.4* *Grade 2 Section 6.5*
7.2 Multiplying Without Regrouping	*3.OA.A Represent and solve problems involving multiplication and division.* *3.OA.B Understand properties of multiplication and the relationship between multiplication and division.* *3.OA.C Multiply and divide within 100.*	
7.3 Multiplying Ones, Tens, and Hundreds with Regrouping	*3.OA.A Represent and solve problems involving multiplication and division.* *3.OA.B Understand properties of multiplication and the relationship between multiplication and division.* *3.OA.C Multiply and divide within 100.* *3.NBT.A Use place value understanding and properties of operations to perform multi-digit arithmetic.+*	
Chapter 8 Division		
8.1 Mental Division	*3.OA.A Represent and solve problems involving multiplication and division.* *3.OA.B Understand properties of multiplication and the relationship between multiplication and division.*	*Grade 2 Section 15.5*

Grade 3 Section	Priority Standards	Prior Learning
	3.OA.C Multiply and divide within 100.	
8.2 Quotient and Remainder	*3.OA.A Represent and solve problems involving multiplication and division.* *3.OA.B Understand properties of multiplication and the relationship between multiplication and division.* *3.OA.C Multiply and divide within 100.*	
8.3 Odd and Even Numbers	*3.OA.A Represent and solve problems involving multiplication and division.* *3.OA.B Understand properties of multiplication and the relationship between multiplication and division.* *3.OA.C Multiply and divide within 100.*	*Grade 2 Section 5.2.a*
8.4 Division Without Remainder and Regrouping	*3.OA.A Represent and solve problems involving multiplication and division.* *3.OA.B Understand properties of multiplication and the relationship between multiplication and division.* *3.OA.C Multiply and divide within 100.*	
8.5 Division with Regrouping in Tens and Ones	*3.OA.A Represent and solve problems involving multiplication and division.* *3.OA.B Understand properties of multiplication and the relationship between multiplication and division.* *3.OA.C Multiply and divide within 100.*	
Chapter 9 Using Bar Models: Multiplication and Division		
9.1 Real-World Problems: Multiplication	*3.OA.A Represent and solve problems involving multiplication and division.* *3.OA.B Understand properties of multiplication and the relationship between multiplication and division.* *3.OA.C Multiply and divide within 100.*	*Grade 2 Section 16.1*
9.2 Real-World Problems: Two-Step Problems with Multiplication	*3.OA.A Represent and solve problems involving multiplication and division.* *3.OA.B Understand properties of multiplication and the relationship between multiplication and division.* *3.OA.C Multiply and divide within 100.* *3.OA.D Solve problems involving the four operations, and identify and explain patterns in arithmetic.*	
9.3 Real-World Problems: Division	*3.OA.A Represent and solve problems involving multiplication and division.* *3.OA.B Understand properties of multiplication and the relationship between multiplication and division.* *3.OA.C Multiply and divide within 100.*	*Grade 2 Section 16.2*

Grade 3 Section	Priority Standards	Prior Learning
9.4 Real-World Problems: Two-Step Problems with Division	*3.OA.A Represent and solve problems involving multiplication and division.* *3.OA.B Understand properties of multiplication and the relationship between multiplication and division.* *3.OA.C Multiply and divide within 100.* *3.OA.D Solve problems involving the four operations, and identify and explain patterns in arithmetic.*	
9.4.a Real-World Problems: Two-Step Problems	*3.OA.D Solve problems involving the four operations, and identify and explain patterns in arithmetic.*	
Chapter 10 Money		
10.1 Addition	Not identified as a priority standard. See teaching suggestions noted in the letter.	
10.2 Subtraction	Not identified as a priority standard. See teaching suggestions noted in the letter.	
10.3 Real-World Problems: Money	Not identified as a priority standard. See teaching suggestions noted in the letter.	
Chapter 11 Metric Length, Mass, and Volume		
11.1 Meters and Centimeters	Not identified as a priority standard. See teaching suggestions noted in the letter.	
11.2 Kilometers and Meters	Not identified as a priority standard. See teaching suggestions noted in the letter.	
11.3 Kilograms and Grams	Not identified as a priority standard. See teaching suggestions noted in the letter.	
11.4 Liters and Milliliters	Not identified as a priority standard. See teaching suggestions noted in the letter.	
Chapter 12 Real-World Problems: Measurement		
12.1 Real-World Problems: One-Step Problems	*3.OA.A Represent and solve problems involving multiplication and division.* *3.OA.B Understand properties of multiplication and the relationship between multiplication and division.* *3.OA.C Multiply and divide within 100.*	*Grade 2 Section 13.5* *Grade 2 Section 16.3*
12.2 Real-World Problems: Two-Step Problems	*3.OA.A Represent and solve problems involving multiplication and division.* *3.OA.B Understand properties of multiplication and the relationship between multiplication and division.* *3.OA.C Multiply and divide within 100.*	
Chapter 13 Bar Graphs and Line Plots		
13.1 Making Bar Graphs with Scales	*3.MD.B Represent and interpret data.+*	
13.2 Reading and Interpreting Bar Graphs	*3.MD.B Represent and interpret data.+*	

Grade 3 Section	Priority Standards	Prior Learning
13.3 Line Plots	*3.MD.B Represent and interpret data.+*	*Grade 2 Section 17.2.a*
Chapter 14 Fractions		
14.1 Understanding Fractions	*3.NF.A Develop understanding of fractions as numbers.* *3.G.A Reason with shapes and their attributes.+*	*Grade 2 Section 12.1*
14.2 Understanding Equivalent Fractions	3.NF.A Develop understanding of fractions as numbers. *3.G.A Reason with shapes and their attributes.+*	*Grade 2 Section 12.1*
14.3 More Equivalent Fractions	3.NF.A Develop understanding of fractions as numbers. *3.G.A Reason with shapes and their attributes.+*	*Grade 2 Section 12.1*
14.4 Comparing Fractions	3.NF.A Develop understanding of fractions as numbers. *3.G.A Reason with shapes and their attributes.+*	*Grade 2 Section 12.2*
14.5 Adding and Subtracting Like Fractions	*3.G.A Reason with shapes and their attributes.+*	*Grade 2 Section 12.3*
14.6 Fraction of a Set	*3.G.A Reason with shapes and their attributes.+* 3.NF.A Develop understanding of fractions as numbers.*	
14.6.a Fractions	3.NF.A Develop understanding of fractions as numbers.	
Chapter 15 Customary Length, Weight, and Capacity		
15.1 Measuring Length	Not identified as a priority standard. See teaching suggestions noted in the letter.	
15.1.a Measuring Length	Not identified as a priority standard. See teaching suggestions noted in the letter.	
15.2 Measuring Weight	Not identified as a priority standard. See teaching suggestions noted in the letter.	
15.3 Measuring Capacity	Not identified as a priority standard. See teaching suggestions noted in the letter.	
Chapter 16 Time and Measurement		
16.1 Telling Time	Not identified as a priority standard. See teaching suggestions noted in the letter.	
16.2 Converting Hours and Minutes	Not identified as a priority standard. See teaching suggestions noted in the letter.	
16.3 Adding Hours and Minutes	Not identified as a priority standard. See teaching suggestions noted in the letter.	
16.4 Subtracting Hours and Minutes	Not identified as a priority standard. See teaching suggestions noted in the letter.	
16.5 Elapsed Time	Not identified as a priority standard. See teaching suggestions noted in the letter.	
16.6 Measuring Temperature	Not identified as a priority standard. See teaching suggestions noted in the letter.	

Grade 3 Section	Priority Standards	Prior Learning
16.7 Real-World Problems: Time and Temperature	Not identified as a priority standard. See teaching suggestions noted in the letter.	
Chapter 17 Angles and Lines		
17.1 Understanding and Identifying Angles	Not identified as a priority standard. See teaching suggestions noted in the letter.	
17.2 Right Angles	Not identified as a priority standard. See teaching suggestions noted in the letter.	
17.3 Perpendicular Lines	Not identified as a priority standard. See teaching suggestions noted in the letter.	
17.4 Parallel Lines	Not identified as a priority standard. See teaching suggestions noted in the letter.	
Chapter 18 Two-Dimensional Shapes		
18.1 Classifying Polygons	Not identified as a priority standard. See teaching suggestions noted in the letter.	
18.2 Congruent Figures	Not identified as a priority standard. See teaching suggestions noted in the letter.	
18.3 Symmetry	Not identified as a priority standard. See teaching suggestions noted in the letter.	
Chapter 19 Area and Perimeter		
19.1 Area	Not identified as a priority standard. See teaching suggestions noted in the letter.	
19.2 Square Units (cm_2 and $in._2$)	Not identified as a priority standard. See teaching suggestions noted in the letter.	
19.3 Square Units (m_2 and ft_2)	Not identified as a priority standard. See teaching suggestions noted in the letter.	
19.4 Perimeter and Area	Not identified as a priority standard. See teaching suggestions noted in the letter.	
19.4.a Real-World Problems Area	Not identified as a priority standard. See teaching suggestions noted in the letter.	
19.5 More Perimeter	Not identified as a priority standard. See teaching suggestions noted in the letter.	

* Priority standards clusters were identified as Priority Instructional Content through Achieve the Core by Student Achievement Partners, Pre-Publication Draft, May 2020. Full documents are available at AchieveTheCore.org.

**International Center for Leadership in Education (ICLE) selected further priority standards, in most cases within the clusters called out by Achieve the Core.

+ This standard selected by ICLE is not within an Achieve the Core cluster.

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Priority standards were identified through Achieve the Core.*
Standards in *italics* were further selected by International Center for Leadership in Education.**

Grade 4 Section	Priority Standards	Prior Learning
Chapter 1 Place Value of Whole Numbers		
1.1 Numbers to 100,000	*4.NBT.A Generalize place value understanding for multi-digit whole numbers.***	*Grade 3 Section 1.2*
1.2 Comparing Numbers to 100,000	4.NBT.A Generalize place value understanding for multi-digit whole numbers.	*Grade 3 Section 1.3*
1.2.a Addition of Multi-Digit Numbers	*4.NBT.B Use place value understanding and properties of operations to perform multi-digit arithmetic.+*	*Grade 3 Section 3.3*
1.2.b Subtraction of Multi-Digit Numbers	4.NBT.B Use place value understanding and properties of operations to perform multi-digit arithmetic.+	*Grade 3 Section 4.3*
Chapter 2 Estimation and Number Theory		
2.1 Estimation	*4.OA.A Use the four operations with whole numbers to solve problems.*	*Grade 3 Section 2.4*
2.2 Factors	Not identified as a priority standard. See teaching suggestions noted in the letter.	
2.3 Multiples	*4.NBT.A Generalize place value understanding for multi-digit whole numbers.*	
Chapter 3 Whole Number Multiplication and Division		
3.0 Multiply Using Arrays	*4.NBT.B Use place value understanding and properties of operations to perform multi-digit arithmetic.+*	*Grade 3 Section 6.1*
3.1 Multiplying by a 1-Digit Number	4.NBT.A Generalize place value understanding for multi-digit whole numbers. *4.NBT.B Use place value understanding and properties of operations to perform multi-digit arithmetic.+* 4.OA.A Use the four operations with whole numbers to solve problems.*	*Grade 3 Section 6.2* *Grade 3 Section 6.3* *Grade 3 Section 6.4* *Grade 3 Section 6.5* *Grade 3 Section 7.1* *Grade 3 Section 7.2* *Grade 3 Section 7.3*
3.1.a Multiply Using Array Models	*4.NBT.B Use place value understanding and properties of operations to perform multi-digit arithmetic.+*	*Grade 3 Section 6.1*
3.2 Multiplying by a 2-Digit Number	4.NBT.A Generalize place value understanding for multi-digit whole numbers. *4.NBT.B Use place value understanding and properties of operations to perform multi-digit arithmetic.+* 4.OA.A Use the four operations with whole numbers to solve problems.	*Grade 3 Section 6.2* *Grade 3 Section 6.3* *Grade 3 Section 6.4* *Grade 3 Section 6.5* *Grade 3 Section 7.1* *Grade 3 Section 7.2* *Grade 3 Section 7.3*

Grade 4 Section	Priority Standards	Prior Learning
3.3 Modeling Division with Regrouping	4.NBT.A Generalize place value understanding for multi-digit whole numbers. *4.NBT.B Use place value understanding and properties of operations to perform multi-digit arithmetic.+*	*Grade 3 Section 6.6* *Grade 3 Section 6.7*
3.4 Dividing by a 1-Digit Number	*4.NBT.B Use place value understanding and properties of operations to perform multi-digit arithmetic.+*	*Grade 3 Section 8.1* *Grade 3 Section 8.2* *Grade 3 Section 8.4* *Grade 3 Section 8.5*
3.5 Real-World Problems Multiplication and Division	*4.OA.A Use the four operations with whole numbers to solve problems.*	*Grade 3 Section 9.1* *Grade 3 Section 9.3*
Chapter 4 Tables and Line Graphs		
4.1 Making and Interpreting a Table	Not identified as a priority standard. See teaching suggestions noted in the letter.	
4.2 Using a Table	Not identified as a priority standard. See teaching suggestions noted in the letter.	
4.3 Line Graphs	Not identified as a priority standard. See teaching suggestions noted in the letter.	
Chapter 5 Data and Probability		
5.1 Average	Not identified as a priority standard. See teaching suggestions noted in the letter.	
5.2 Median, Mode, and Range	Not identified as a priority standard. See teaching suggestions noted in the letter.	
5.3 Stem-and-Leaf Plots	Not identified as a priority standard. See teaching suggestions noted in the letter.	
5.4 Outcomes	Not identified as a priority standard. See teaching suggestions noted in the letter.	
5.5 Probability as a Fraction	4.NF.A Extend understanding of fraction equivalence and ordering.	Grade 3 Section 14.1 Grade 3 Section 14.2
5.6 Real-World Problems: Data and Probability	4.NF.A Extend understanding of fraction equivalence and ordering. *4.OA.A Use the four operations with whole numbers to solve problems.*	*Grade 3 Section 14.1* *Grade 3 Section 14.2*
Chapter 6 Fractions and Mixed Numbers		
6.0 Comparing Unlike Fractions	*4.NF.A Extend understanding of fraction equivalence and ordering.*	*Grade 3 Section 14.4*
6.1 Adding Fractions	4.NF.A Extend understanding of fraction equivalence and ordering.	*Grade 3 Section 14.5*
6.2 Subtracting Fractions	4.NF.A Extend understanding of fraction equivalence and ordering.	*Grade 3 Section 14.5*
6.3 Mixed Numbers	Not identified as a priority standard. See teaching suggestions noted in the letter.	
6.4 Improper Fractions	Not identified as a priority standard. See teaching suggestions noted in the letter.	

Grade 4 Section	Priority Standards	Prior Learning
6.5 Renaming Improper Fractions and Mixed Numbers	Not identified as a priority standard. See teaching suggestions noted in the letter.	
6.6 Renaming Whole Numbers When Adding and Subtracting Fractions	4.NF.A Extend understanding of fraction equivalence and ordering.	
6.7 Fraction of a Set	4.NF.B Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers.+	Grade 3 Section 14.6
6.7.a Multiplying Fractions and Whole Numbers	4.NF.B Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers.+	
6.8 Real-World Problems: Fractions	4.NF.B Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers.+ 4.OA.A Use the four operations with whole numbers to solve problems.	
6.8.a Line Plots with Fractions of a Unit	4.MD.B Represent and interpret data.+	Grade 3 Section 13.3
Chapter 7 Decimals		
7.1 Understanding Tenths	4.NF.C Understand decimal notation for fractions, and compare decimal fractions.	
7.2 Understanding Hundredths	4.NF.C Understand decimal notation for fractions, and compare decimal fractions.	
7.3 Comparing Decimals	4.NF.C Understand decimal notation for fractions, and compare decimal fractions.	
7.4 Rounding Decimals	Not identified as a priority standard. See teaching suggestions noted in the letter.	
7.5 Fractions and Decimals	4.NF.A Extend understanding of fraction equivalence and ordering. 4.NF.C Understand decimal notation for fractions, and compare decimal fractions.	
Chapter 8 Adding and Subtracting Decimals		
8.1 Adding Decimals	4.NBT.A Generalize place value understanding for multi-digit whole numbers. 4.NBT.B Use place value understanding and properties of operations to perform multi-digit arithmetic.+ 4.NF.C Understand decimal notation for fractions, and compare decimal fractions.	
8.2 Subtracting Decimals	4.NBT.A Generalize place value understanding for multi-digit whole numbers. 4.NBT.B Use place value understanding and properties of operations to perform multi-digit arithmetic.+	

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Grade 4 Section	Priority Standards	Prior Learning
8.3 Real-World Problems: Decimals	Not identified as a priority standard. See teaching suggestions noted in the letter..	
Chapter 9 Angles		
9.1 Understanding and Measuring Angles	Not identified as a priority standard. See teaching suggestions noted in the letter.	
9.2 Drawing Angles to 180˚	Not identified as a priority standard. See teaching suggestions noted in the letter.	
9.3 Turns and Right Angles	Not identified as a priority standard. See teaching suggestions noted in the letter.	
9.3.a Understanding Angle Measurement	Not identified as a priority standard. See teaching suggestions noted in the letter.	
9.3.b Understanding Angle Measurement is Additive	Not identified as a priority standard. See teaching suggestions noted in the letter.	
Chapter 10 Perpendicular and Parallel Line Segments		
10.1 Drawing Perpendicular Line Segments	Not identified as a priority standard. See teaching suggestions noted in the letter.	
10.2 Drawing Parallel Line Segments	Not identified as a priority standard. See teaching suggestions noted in the letter.	
10.3 Horizontal and Vertical Lines	Not identified as a priority standard. See teaching suggestions noted in the letter.	
Chapter 11 Squares and Rectangles		
11.1 Squares and Rectangles	Not identified as a priority standard. See teaching suggestions noted in the letter.	
11.2 Properties of Squares and Rectangles	*4.OA.A Use the four operations with whole numbers to solve problems.*	
Chapter 12 Area and Perimeter		
12.0.a Measurement: Length	Not identified as a priority standard. See teaching suggestions noted in the letter.	
12.0.b Measurement: Mass and Weight	Not identified as a priority standard. See teaching suggestions noted in the letter.	
12.0.c Time	Not identified as a priority standard. See teaching suggestions noted in the letter.	
12.0.d Real-World Problems: Measurement	Not identified as a priority standard. See teaching suggestions noted in the letter.	
12.1 Area of a Rectangle	*4.MD.A Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit.+*	*Grade 3 Section 19.1*
12.2 Rectangles and Squares	*4.MD.A Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit.+*	*Grade 3 Section 19.2 Grade 3 Section 19.3*

Grade 4 Section	Priority Standards	Prior Learning
12.3 Composite Figures	*4.MD.A Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit.+* *4.OA.A Use the four operations with whole numbers to solve problems.*	
12.4 Using Formulas for Area and Perimeter	*4.OA.A Use the four operations with whole numbers to solve problems.* *4.MD.A Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit.+*	*Grade 3 Section 19.4*
Chapter 13 Symmetry		
13.1 Identifying Lines of Symmetry	*4.G.A Draw and identify lines and angles, and classify shapes by properties of their lines and angles.+*	
13.2 Rotational Symmetry	Not identified as a priority standard. See teaching suggestions noted in the letter.	
13.3 Making Symmetric Shapes and Patterns	*4.G.A Draw and identify lines and angles, and classify shapes by properties of their lines and angles.+*	
Chapter 14 Tessellations		
14.1 Identifying Tessellations	Not identified as a priority standard. See teaching suggestions noted in the letter.	
14.2 More Tessellations	Not identified as a priority standard. See teaching suggestions noted in the letter.	

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**International Center for Leadership in Education (ICLE) selected further priority standards, in most cases within the clusters called out by Achieve the Core.

+ This standard selected by ICLE is not within an Achieve the Core cluster.

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Priority standards were identified through Achieve the Core.*
Standards in *italics* were further selected by International Center for Leadership in Education.**

Grade 5 Section	Priority Standards	Prior Learning
Chapter 1 Whole Numbers		
1.1 Numbers to 10,000,000	5.NBT.A Understand the place value system.*	Grade 4 Section 1.1
1.2 Place Value	5.NBT.A Understand the place value system.	Grade 4 Section 1.1
1.3 Comparing Numbers to 10,000,000	5.NBT.A Understand the place value system.	Grade 4 Section 1.2
1.4 Rounding and Estimating	Not identified as a priority standard. See teaching suggestions noted in the letter.	
Chapter 2 Whole Number Multiplication and Division		
2.1 Using a Calculator	*5.NBT.B Perform operations with multi-digit whole numbers and with decimals to hundredths.**	
2.2 Multiplying by Tens, Hundreds, or Thousands	5.NBT.A Understand the place value system. *5.NBT.B Perform operations with multi-digit whole numbers and with decimals to hundredths.*	
2.2a Multiplying by Powers of Ten	5.NBT.A Understand the place value system.	
2.3 Multiplying by 2-Digit Numbers	*5.NBT.B Perform operations with multi-digit whole numbers and with decimals to hundredths.*	*Grade 4 Section 3.2*
2.4 Dividing by Tens, Hundreds, or Thousands	5.NBT.A Understand the place value system. *5.NBT.B Perform operations with multi-digit whole numbers and with decimals to hundredths.*	
2.5 Dividing by 2-Digit Numbers	*5.NBT.B Perform operations with multi-digit whole numbers and with decimals to hundredths.*	*Grade 4 Section 3.4*
2.6 Order of Operations	Not identified as a priority standard. See teaching suggestions noted in the letter.	
2.6a Evaluating Expressions with Parentheses, Brackets, and Braces	Not identified as a priority standard. See teaching suggestions noted in the letter.	
2.7 Real-World Problems: Multiplication and Division	*5.NBT.B Perform operations with multi-digit whole numbers and with decimals to hundredths.*	*Grade 4 Section 3.5*
Chapter 3 Fractions and Mixed Numbers		
3.1 Adding Unlike Fractions	*5.NF.A Use equivalent fractions as a strategy to add and subtract fractions.*	*Grade 4 Section 6.1*
3.2 Subtracting Unlike Fractions	*5.NF.A Use equivalent fractions as a strategy to add and subtract fractions.*	*Grade 4 Section 6.2*
3.3 Fractions, Mixed Numbers, and Division Expressions	5.NF.B Apply and extend previous understandings of multiplication and division to multiply and divide fractions.	Grade 4 Section 6.3 Grade 4 Section 6.4 Grade 4 Section 6.5

Grade 5 Section	Priority Standards	Prior Learning
3.4 Expressing Fractions, Division Expressions, and Mixed Numbers as Decimals	5.NF.B Apply and extend previous understandings of multiplication and division to multiply and divide fractions	Grade 4 Section 7.5
3.5 Adding Mixed Numbers	5.NF.A Use equivalent fractions as a strategy to add and subtract fractions.	Grade 4 Section 6.1 Grade 4 Section 6.3
3.6 Subtracting Mixed Numbers	5.NF.A Use equivalent fractions as a strategy to add and subtract fractions.	Grade 4 Section 6.1 Grade 4 Section 6.3
3.7 Real-World Problems: Fractions and Mixed Numbers	*5.NF.A Use equivalent fractions as a strategy to add and subtract fractions.* 5.NF.B Apply and extend previous understandings of multiplication and division to multiply and divide fractions.	*Grade 4 Section 6.8*
Chapter 4 Multiplying and Dividing Fractions and Mixed Numbers		
4.0 Multiplying with Whole Numbers and Proper Fractions	5.NF.B Apply and extend previous understandings of multiplication and division to multiply and divide fractions.	
4.1 Multiplying Proper Fractions	*5.NF.B Apply and extend previous understandings of multiplication and division to multiply and divide fractions.*	
4.2 Real-World Problems: Multiplying with Proper Fractions	*5.NF.B Apply and extend previous understandings of multiplication and division to multiply and divide fractions.*	
4.3 Multiplying Improper Fractions by Fractions	*5.NF.B Apply and extend previous understandings of multiplication and division to multiply and divide fractions.*	
4.4 Multiplying Mixed Numbers and Whole Numbers	*5.NF.B Apply and extend previous understandings of multiplication and division to multiply and divide fractions.*	
4.5 Real-World Problems: Multiplying with Mixed Numbers	*5.NF.B Apply and extend previous understandings of multiplication and division to multiply and divide fractions.*	
4.6 Dividing a Fraction by a Whole Number	*5.NF.B Apply and extend previous understandings of multiplication and division to multiply and divide fractions.*	
4.6.a Dividing a Whole Number by a Unit Fraction	5.NF.B Apply and extend previous understandings of multiplication and division to multiply and divide fractions.	
4.7 Real-World Problems: Multiplying and Dividing with Fractions	*5.NF.B Apply and extend previous understandings of multiplication and division to multiply and divide fractions.*	

Grade 5 Section	Priority Standards	Prior Learning
4.7a Real-World Problems: Dividing a Whole Number by a Unit Fraction	*5.NF.B Apply and extend previous understandings of multiplication and division to multiply and divide fractions.*	
Chapter 5 Algebra		
5.1 Using Letters as Numbers	Not identified as a priority standard. See teaching suggestions noted in the letter.	
5.2 Simplifying Algebraic Expressions	Not identified as a priority standard. See teaching suggestions noted in the letter.	
5.3 Inequalities and Equations	Not identified as a priority standard. See teaching suggestions noted in the letter.	
5.4 Real-World Problems: Algebra	Not identified as a priority standard. See teaching suggestions noted in the letter.	
Chapter 6 Area of a Triangle		
6.0 Finding the Area of a Rectangle with Fractional Side Lengths	*5.NF.B Apply and extend previous understandings of multiplication and division to multiply and divide fractions.*	*Grade 4 Section 12.1 Grade 4 Section 12.4*
6.1 Base and Height of a Triangle	Not identified as a priority standard. See teaching suggestions referenced in the letter.	
6.2 Finding the Area of a Triangle	Not identified as a priority standard. See teaching suggestions referenced in the letter.	
Chapter 7 Ratio		
7.1 Finding Ratio	Not identified as a priority standard. See teaching suggestions noted in the letter.	
7.2 Equivalent Ratios	5.NF.B Apply and extend previous understandings of multiplication and division to multiply and divide fractions.	
7.3 Real-World Problems: Ratios	Not identified as a priority standard. See teaching suggestions noted in the letter.	
7.4 Ratios in Fraction Form	Not identified as a priority standard. See teaching suggestions noted in the letter.	
7.5 Comparing Three Quantities	5.NF.B Apply and extend previous understandings of multiplication and division to multiply and divide fractions.	
7.6 Real-World Problems: More Ratios	5.NF.B Apply and extend previous understandings of multiplication and division to multiply and divide fractions.	
Chapter 8 Decimals		
8.1 Understanding Thousandths	*5.NBT.A Understand the place value system.* *5.NBT.B Perform operations with multi-digit whole numbers and with decimals to hundredths.*	*Grade 4 Section 7.1 Grade 4 Section 7.2*
8.2 Comparing and Rounding Decimals	5.NBT.A Understand the place value system.	Grade 4 Section 7.3 Grade 4 Section 7.4

Grade 5 Section	Priority Standards	Prior Learning
8.3 Rewriting Decimals as Fractions and Mixed Numbers	5.NBT.A Understand the place value system.	Grade 4 Section 7.5
Chapter 9 Multiplying and Dividing Decimals		
9.1 Multiplying Decimals	5.NBT.A Understand the place value system. *5.NBT.B Perform operations with multi-digit whole numbers and with decimals to hundredths.*	
9.2 Multiplying by Tens, Hundreds, or Thousands	5.NBT.A Understand the place value system. *5.NBT.B Perform operations with multi-digit whole numbers and with decimals to hundredths.*	
9.2.a Multiplying Decimals by Powers of Ten	5.NBT.A Understand the place value system.	
9.3 Dividing Decimals	5.NBT.A Understand the place value system. *5.NBT.B Perform operations with multi-digit whole numbers and with decimals to hundredths.*	
9.4 Dividing by Tens, Hundreds, or Thousands	5.NBT.A Understand the place value system. *5.NBT.B Perform operations with multi-digit whole numbers and with decimals to hundredths.*	
9.5 Estimating Decimals	5.NBT.A Understand the place value system. *5.NBT.B Perform operations with multi-digit whole numbers and with decimals to hundredths.*	
9.6 Real-World Problems: Decimals	5.NBT.A Understand the place value system. *5.NBT.B Perform operations with multi-digit whole numbers and with decimals to hundredths*	
Chapter 10 Percent		
10.1 Percent	Not identified as a priority standard. See teaching suggestions noted in the letter.	
10.2 Expressing Fractions as Percents	Not identified as a priority standard. See teaching suggestions noted in the letter.	
10.3 Percent of a Number	Not identified as a priority standard. See teaching suggestions noted in the letter.	
10.4 Real-World Problems: Percent	Not identified as a priority standard. See teaching suggestions noted in the letter.	
Chapter 11 Graphs and Probability		
11.1 Making and Interpreting Double Bar Graphs	Not identified as a priority standard. See teaching suggestions noted in the letter.	
11.1a Making and Interpreting Line Plots	Not identified as a priority standard. See teaching suggestions noted in the letter.	
11.2 Graphing an Equation	*5.G.A Graph points on the coordinate plane to solve real-world and mathematical problems.*	*Grade 4 Section 4.3*
11.3 Combinations	Not identified as a priority standard. See teaching suggestions noted in the letter.	

Grade 5 Section	Priority Standards	Prior Learning
11.4 Theoretical Probability and Experimental Probability	Not identified as a priority standard. See teaching suggestions noted in the letter.	
Chapter 12 Angles		
12.1 Angles on a Line	Not identified as a priority standard. See teaching suggestions noted in the letter.	
12.2 Angles at a Point	Not identified as a priority standard. See teaching suggestions noted in the letter.	
12.3 Vertical Angles	Not identified as a priority standard. See teaching suggestions noted in the letter.	
Chapter 13 Properties of Triangles and Four-Sided Figures		
13.1 Classifying Triangles	Not identified as a priority standard. See teaching suggestions noted in the letter.	
13.2 Measures of Angles of a Triangle	Not identified as a priority standard. See teaching suggestions noted in the letter.	
13.3 Right, Isosceles, and Equilateral Triangles	Not identified as a priority standard. See teaching suggestions noted in the letter.	
13.4 Triangle Inequalities	Not identified as a priority standard. See teaching suggestions noted in the letter.	
13.5 Parallelogram, Rhombus, and Trapezoid	Not identified as a priority standard. See teaching suggestions noted in the letter.	
Chapter 14 Three-Dimensional Shapes		
14.1 Prisms and Pyramids	Not identified as a priority standard. See teaching suggestions noted in the letter.	
14.2 Cylinder, Sphere, and Cone	Not identified as a priority standard. See teaching suggestions noted in the letter.	
Chapter 15 Surface Area and Volume		
15.1 Building Solids Using Unit Cubes	Not identified as a priority standard. See teaching suggestions noted in the letter.	
15.2 Drawing Cubes and Rectangular Prisms	Not identified as a priority standard. See teaching suggestions noted in the letter.	
15.3 Nets and Surface Area	*5.NBT.B Perform operations with multi-digit whole numbers and with decimals to hundredths.*	*Grade 4 Section 12.1 Grade 4 Section 12.2*
15.4 Understanding and Measuring Volume	5.MD.C Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition.	
15.5 Volume of a Rectangular Prism and Liquid	*5.MD.C Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition.*	
15.5.a Volume of a Rectangular Prism	5.MD.C Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition.	

Grade 5 Section	Priority Standards	Prior Learning
15.5.b Volume of Solid Figures	5.MD.C Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition.	

* Priority standards clusters were identified as Priority Instructional Content through Achieve the Core by Student Achievement Partners, Pre-Publication Draft, May 2020. Full documents are available at AchieveTheCore.org.

**International Center for Leadership in Education (ICLE) selected further priority standards, in most cases within the clusters called out by Achieve the Core.

+ This standard selected by ICLE is not within an Achieve the Core cluster.