

# Math Mammoth Grade 6 Alignment to the Common Core Standards

The table below lists each lesson in the two student worktexts, 6-A and 6-B, and next to it the relevant Common Core Standard (CCS).

## Math Mammoth Grade 6-A

### Chapter 1: Review of the Basic Operations

Lesson	page	Standards
Warm Up: Mental Math	9	6.EE.7
Review of the Four Operations 1	11	6.NS.2
Review of the Four Operations 2	17	6.NS.2 6.NS.3 6.RP.3
Powers and Exponents	20	6.EE.1
Place Value	23	6.EE.1
Rounding and Estimating	27	
Lessons in Problem Solving	30	6.NS.3
Chapter 1 Review	34	6.EE.1 6.NS.2 6.NS.3

### Chapter 2: Expressions and Equations

Lesson	page	Standards
Terminology for the Four Operations	40	6.EE.2 6.EE.7
The Order of Operations	44	6.EE.1 6.EE.2
Multiplying and Dividing in Parts	47	6.EE.3
Expressions	51	6.EE.1 6.EE.2 6.EE.4
Writing and Simplifying Expressions 1: Length and Perimeter	54	6.EE.2 6.EE.3
More on Writing and Simplifying Expressions	57	6.EE.2 6.EE.3 6.EE.4

### Chapter 2: Expressions and Equations

Lesson	page	Standards
Writing and Simplifying Expressions 2: Area	60	6.EE.2 6.EE.3
The Distributive Property	65	6.EE.3
Equations	69	6.EE.2 6.EE.5 6.EE.7
More Equations	73	6.EE.3 6.EE.7
Inequalities	77	6.EE.8
Using Two Variables	81	6.EE.9
Mixed Review Chapter 2	85	6.NS.2 6.EE.1 6.EE.2
Chapter 2 Review	87	6.EE.1 6.EE.2 6.EE.3 6.EE.4 6.EE.5 6.EE.6 6.EE.7 6.EE.8 6.EE.9

## Chapter 3: Decimals

Lesson	page	Standards
Place Value with Decimals	95	
Comparing Decimals	97	
Add and Subtract Decimals	99	6.NS.3 6.EE.2
Rounding Decimals	101	5.NBT.4
Review: Multiply and Divide Decimals Mentally	104	
Review: Multiply Decimals by Decimals	106	6.NS.3 6.EE.2 6.EE.7
Review: Long Division with Decimals	109	6.NS.3
Problem Solving with Decimals	111	6.RP.3 6.NS.3
Fractions and Decimals	113	7.NS.2.d
Multiply and Divide by Powers of Ten	116	6.NS.3
Review: Divide Decimals by Decimals	118	6.NS.3 6.EE.7
Divide Decimals by Decimals 2	121	6.NS.3 6.EE.2 6.EE.7
Convert Customary Measuring Units	123	
Convert Metric Measuring Units	127	
Convert Between Customary and Metric	130	
Mixed Review Chapter 3	132	6.NS.2 6.EE.2 6.EE.3 6.EE.5 6.EE.8
Chapter 3 Review	134	6.NS.3 6.EE.1 6.EE.2 6.EE.7

## Chapter 4: Ratios

Lesson	page	Standards
Ratios and Rates	141	6.RP.1 6.RP.3
Unit Rates	145	6.RP.2 6.RP.3
Using Equivalent Rates .	147	6.RP.3 6.EE.9
Ratio Problems and Bar Models 1	151	6.RP.3
Ratio Problems and Bar Models 2	154	6.RP.3
Aspect Ratio	157	6.RP.3
Using Rates to Convert Measuring Units	159	6.RP.3
Mixed Review Chapter 4	163	6.NS.3 6.EE.1 6.EE.2 6.EE.9
Chapter 4 Review	165	6.RP.1 6.RP.2 6.RP.3

## Chapter : Percent

Lesson	page	Standards
Percent	170	
What Percentage . . . ?	174	
Percentage of a Number (Mental Math)	176	6.RP.3
Percentage of a Number: Using Decimals	179	6.RP.3
Discounts	182	
Practice with Percent	184	6.RP.3
Finding the Total When the Percent Is Known	187	6.RP.3
Mixed Review Chapter 5	189	6.NS.2 6.NS.3 6.EE.2 6.EE.3 6.EE.7 6.RP.3
Review: Percent	191	6.RP.3

# Math Mammoth Grade 6-B

## Chapter 6: Prime Factorization, GCF, and LCM

*Note: prime factorization is included as a review from 5th grade.*

Lesson	page	Standards
The Sieve of Eratosthenes and Prime Factorization	10	
Using Factoring When Simplifying Fractions	13	
The Greatest Common Factor (GCF)	16	6.NS.4
Factoring Sums	19	6.NS.4
The Least Common Multiple (LCM)	22	6.NS.4
Mixed Review Chapter 6	26	6.NS.3 6.RP.3 6.EE.1 6.EE.2 6.EE.3 6.EE.5
Chapter 6 Review	28	6.NS.4

## Chapter 7: Fractions

*Note: addition, subtraction, and multiplication of fractions are included as review from 5th grade.*

Lesson	page	Standards
Review: Add and Subtract Fractions and Mixed Numbers	34	6.EE.2 5.NF.1 5.NF.2
Add and Subtract Fractions: More Practice	38	5.NF.1
Review: Multiplying Fractions 1	41	5.NF.4 5.NF.6
Review: Multiplying Fractions 2	44	5.NF.4 5.NF.6
Dividing Fractions: Reciprocal Numbers	47	6.NS.1
Divide Fractions	52	6.NS.1

## Chapter 7: Fractions, cont.

Lesson	page	Standards
Problem Solving with Fractions 1	56	6.NS.1
Problem Solving with Fractions 2	59	6.NS.1 6.RP.3
Mixed Review Chapter 7	62	6.RP.3 6.NS.3 6.NS.4 6.EE.2
Fractions Review	64	6.NS.1 6.RP.3

## Chapter 8: Integers

*Note: Addition and subtraction of integers are not included in the standards for 6th grade. I have included them here simply because I feel students are ready to study them, at least to some extent, at the same time as they study the concepts of integers, absolute value, and ordering integers. In 7th grade, we study all operations with integers.*

Lesson	page	Standards
Integers	71	6.NS.5 6.NS.6 6.NS.7
Coordinate Grid	74	6.NS.8
Coordinate Grid Practice	78	6.NS.7 6.NS.8 6.G.3
Addition and Subtraction as Movements	81	7.NS.1
Adding Integers: Counters	84	7.NS.1
Subtracting a Negative Integer	87	7.NS.1
Add and Subtract Roundup	89	7.NS.1
Graphing	91	6.NS.8 6.EE.2 6.EE.9
Mixed Review Chapter 8	95	6.EE.7 6.RP.3 6.NS.1
Integers Review	97	6.NS.5 6.NS.6 6.NS.7 6.NS.8 6.G.3

## Chapter 9: Geometry

*Note: I have included lessons for quadrilateral and drawing for review purposes.*

Lesson	page	Standards
Quadrilaterals Review	104	5.G.4
Drawing Problems	106	
Area of Right Triangles	108	6.G.1
Area of Parallelograms	110	6.G.1
Area of Triangles	113	6.G.1
Area of Polygons	116	6.G.1
Polygons in the Coordinate Grid	119	6.NS.8 6.G.3
Area and Perimeter Problems	122	6.G.1 6.RP.3
Nets and Surface Area 1	124	6.G.4
Nets and Surface Area 2	127	6.G.4
Converting Between Area Units	131	6.G.1
Volume of a Rectangular Prism with Fractional Side Lengths	133	6.G.2
Volume Problems	136	6.G.2
Mixed Review Chapter 9	138	6.NS.1 6.NS.3 6.RP.1 6.RP.2 6.RP.3 6.EE.7 6.EE.9 6.G.1 6.G.3
Geometry Review	141	6.G.1 6.G.2 6.G.4

## Chapter 10: Statistics

Lesson	page	Standards
Understanding Distributions	148	6.SP.1 6.SP.2 6.SP.4 6.SP.5
Mean, Median, and Mode	153	6.SP.3 6.SP.4 6.SP.5
Using Mean, Median, and Mode	155	6.SP.3 6.SP.4 6.SP.5
Measures of Variation	158	6.SP.3 6.SP.4 6.SP.5
Making Histograms	163	6.SP.4 6.SP.5
Boxplots	166	6.SP.4
Stem-and-Leaf-Plots	170	6.SP.4 6.SP.5
Mixed Review Chapter 10	173	6.NS.1 6.NS.4 6.NS.7 6.G.1 6.G.3 6.EE.3 6.EE.7
Statistics Review	176	6.SP.1 6.SP.2 6.SP.3 6.SP.4 6.SP.5