

Math Mammoth Grade 6 (2022 ed.)

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	13	6.EE.7
Review of the Four Operations 1	15	6.NS.2
Review of the Four Operations 2	21	6.NS.2 6.NS.3 6.RP.3
Powers and Exponents	24	6.EE.1
Place Value	27	6.EE.1
Rounding and Estimating	31	4.NBT.3
Lessons in Problem Solving	34	6.NS.3
Chapter 1 Mixed Review	38	5.NF.1
Chapter 1 Review	40	6.EE.1 6.NS.2 6.NS.3

Chapter 2: Expressions and Equations

Lesson	page	Standards
The Order of Operations	45	6.EE.1 6.EE.2
Expressions, Part 1	47	6.EE.1 6.EE.2
Terminology for the Four Operations	49	6.EE.2 6.EE.7
Words and Expressions	51	6.EE.2 6.EE.6
Expressions, Part 2	53	6.EE.2 6.EE.4 6.EE.6

Chapter 2: Expressions and Equations

Lesson	page	Standards
Writing and Simplifying Expressions 1: Length and Perimeter	55	6.EE.2 6.EE.3 6.EE.6
More on Writing and Simplifying Expressions	58	6.EE.2 6.EE.3 6.EE.4 6.EE.6
Writing and Simplifying Expressions 2: Area	61	6.EE.2 6.EE.3 6.EE.6
Multiplying and Dividing in Parts	66	6.EE.3
The Distributive Property	70	6.EE.3
Equations	74	6.EE.2 6.EE.5 6.EE.7
Solving Equations	76	6.EE.3 6.EE.7
Writing Equations	80	6.EE.2 6.EE.3 6.EE.7
Inequalities	82	6.EE.8
Using Two Variables	86	6.EE.9
Chapter 2 Mixed Review	90	5.NF.6 6.NS.2 6.EE.1 6.EE.2
Chapter 2 Review	92	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	99	
Comparing Decimals	101	
Add and Subtract Decimals	103	6.NS.3 6.EE.2
Rounding Decimals	105	
Review: Multiply and Divide Decimals Mentally	108	5.NBT.7
Review: Multiply Decimals by Decimals	110	6.NS.3 6.EE.2 6.EE.7
Review: Long Division with Decimals	113	6.NS.3
Problem Solving with Decimals	115	6.RP.3 6.NS.3
Fractions and Decimals	117	
Multiply and Divide by Powers of Ten	120	6.NS.3
Review: Divide Decimals by Decimals	122	6.NS.3 6.EE.7
Divide Decimals by Decimals 2	125	6.NS.3 6.EE.2 6.EE.7
Convert Customary Measuring Units	127	5.MD.1
Convert Metric Measuring Units	131	5.MD.1
Convert Between Customary and Metric	134	
Chapter 3 Mixed Review	136	6.NS.2 6.EE.2 6.EE.3 6.EE.5 6.EE.8
Chapter 3 Review	138	6.NS.3 6.EE.1 6.EE.2 6.EE.7

Chapter 4: Ratios

Lesson	page	Standards
Ratios and Rates	145	6.RP.1 6.RP.3
Unit Rates	149	6.RP.2 6.RP.3
Using Equivalent Rates .	151	6.RP.3 6.EE.9
Ratio Problems and Bar Models 1	155	6.RP.3
Ratio Problems and Bar Models 2	158	6.RP.3
Aspect Ratio	161	6.RP.3
Using Rates to Convert Measuring Units	163	6.RP.3
Chapter 4 Mixed Review	167	6.NS.3 6.EE.1 6.EE.2 6.EE.9
Chapter 4 Review	169	6.RP.1 6.RP.2 6.RP.3

Chapter 5: Percent

Lesson	page	Standards
Percent	173	
What Percentage . . . ?	177	
Percentage of a Number (Mental Math)	179	6.RP.3
Percentage of a Number: Using Decimals	182	6.RP.3
Discounts	185	6.RP.3 7.RP.3
Practice with Percent	187	6.RP.3
Finding the Total When the Percent Is Known	190	6.RP.3
Chapter 5 Mixed Review	192	6.NS.2 6.NS.3 6.EE.2 6.EE.3 6.EE.7 6.RP.3
Review: Percent	194	6.RP.3

Math Mammoth Grade 6-B

Chapter 6: Prime Factorization, GCF, and LCM

Note: prime factorization is not a topic in the CCS but is included in Math Mammoth.

Lesson	page	Standards
The Sieve of Eratosthenes and Prime Factorization	13	
Using Factoring When Simplifying Fractions	17	
The Greatest Common Factor (GCF)	20	6.NS.4
Factoring Sums	23	6.NS.4
The Least Common Multiple (LCM)	26	6.NS.4
Chapter 6 Mixed Review	30	6.NS.3 6.RP.3 6.EE.1 6.EE.2 6.EE.3 6.EE.5
Chapter 6 Review	32	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	37	6.EE.2 5.NF.1 5.NF.2
Add and Subtract Fractions: More Practice	41	5.NF.1
Review: Multiplying Fractions 1	44	5.NF.4 5.NF.6
Review: Multiplying Fractions 2	47	5.NF.4 5.NF.6
Dividing Fractions: Reciprocal Numbers	50	6.NS.1
Divide Fractions	55	6.NS.1
Problem Solving with Fractions 1	59	6.NS.1

Chapter 7: Fractions, cont.

Lesson	page	Standards
Problem Solving with Fractions 2	62	6.NS.1 6.RP.3
Chapter 7 Mixed Review	65	6.RP.3 6.NS.4 6.EE.2
Fractions Review	67	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	73	6.NS.5 6.NS.6 6.NS.7
Coordinate Grid	76	6.NS.8
Coordinate Grid Practice	80	6.NS.7 6.NS.8 6.G.3
Addition and Subtraction as Movements	83	7.NS.1
Adding Integers: Counters	86	7.NS.1
Subtracting a Negative Integer	89	7.NS.1
Add and Subtract Roundup	91	7.NS.1
Graphing	93	6.NS.8 6.EE.2 6.EE.9
Chapter 8 Mixed Review	97	6.EE.7 6.RP.3 6.NS.1
Integers Review	99	6.NS.5 6.NS.6 6.NS.7 6.NS.8 6.G.3

Chapter 9: Geometry

Lesson	page	Standards
Quadrilaterals Review	105	5.G.4
Triangles Review	108	
Area of Right Triangles	110	6.G.1
Area of Parallelograms	112	6.G.1
Area of Triangles	115	6.G.1
Polygons in the Coordinate Grid	117	6.NS.8 6.G.3
Area of Polygons	120	6.G.1
Area of Shapes not Drawn on Grid	122	6.G.1
Area and Perimeter Problems	124	6.G.1 6.RP.3
Nets and Surface Area 1	126	6.G.4
Nets and Surface Area 2	129	6.G.4
Problems to Solve — Surface Area	131	6.G.4
Converting Between Area Units	133	6.G.1
Volume of a Rectangular Prism with Fractional Side Lengths	135	6.G.2
Volume Problems	138	6.G.2
Chapter 9 Mixed Review	140	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	143	6.G.1 6.G.2 6.G.4

Chapter 10: Statistics

Lesson	page	Standards
Understanding Distributions	149	6.SP.1 6.SP.2 6.SP.4 6.SP.5
Mean, Median, and Mode	154	6.SP.3 6.SP.4 6.SP.5
Using Mean, Median, and Mode	156	6.SP.3 6.SP.4 6.SP.5
Range and Interquartile Range	158	6.SP.3 6.SP.4 6.SP.5
Boxplots	160	6.SP.4
Mean Absolute Deviation	163	6.SP.3 6.SP.4 6.SP.5
Making Histograms	167	6.SP.4 6.SP.5
Summarizing Statistical Distributions	170	6.SP.4 6.SP.5
Stem-and-Leaf-Plots	174	6.SP.4 6.SP.5
Chapter 10 Mixed Review	176	6.NS.1 6.NS.4 6.NS.7 6.G.1 6.G.3 6.EE.3 6.EE.7
Statistics Review	179	6.SP.1 6.SP.2 6.SP.3 6.SP.4 6.SP.5