

Knowre Math: Grade 5 Curriculum

Chapter 1 Whole Numbers and Number Sense

Lesson	Topic	GA Standards of Excellence
1-1 Place Value: Whole Numbers	A) Place Value Relationships	MGSE5.NBT.1, MGSE5.NBT.2
	B) Expanded Form	
1-2 Products with Multiples of 10	A) Patterns in Zeros - Multiplication	MGSE5.NBT.1, MGSE5.NBT.2
	B) Estimating Products	
1-3 Powers of 10	A) Exponents	MGSE5.NBT.2
	B) Powers of Ten	
1-4 Number Properties	A) Commutative Property	MGSE5.OA.1, MGSE5.OA.2
	B) Associative Property	
	C) Identity Property	
	D) Multiplication and Division by Zero	
	E) Distributive Property	

Chapter 2 Whole Number Multiplication

Lesson	Topic	GA Standards of Excellence
2-1 Multiplying by One-Digit Numbers - Tables and Partial Products	A) Multiply a One-Digit Number and a Multi-Digit Number - Table	MGSE4.NBT.5
	B) Multiply a One-Digit Number and a Multi-Digit Number - Partial Products	
2-2 Multiplying by One-Digit Numbers - Standard Algorithm	A) Multiply a One-Digit Number and a Multi-Digit Number - Standard Algorithm	MGSE5.NBT.5
	B) Horizontal Multiplication of a One-Digit Number and a Multi-Digit Number	
2-3 Multiplying Two Multi-Digit Numbers - Tables and Partial Products	A) Multiply Two Multi-Digit Numbers - Table	MGSE5.NBT.5
	B) Multiply Two Multi-Digit Numbers - Partial Products	
2-4 Multiplying Two Multi-Digit Numbers - Standard Algorithm	A) Multiply Two Multi-Digit Numbers - Standard Algorithm	MGSE5.NBT.5
	B) Horizontal Multiplication of Two Multi-Digit Numbers	

Knowre Math: **Grade 5** Curriculum

Chapter 3 Whole Number Division

Lesson	Topic	GA Standards of Excellence
3-1 Quotients with Multiples of 10	A) Patterns in Zeros - Division	MGSE5.NBT.1, MGSE5.NBT.2
	B) Estimating Quotients	
3-2 Dividing by One-Digit Numbers	A) Divide a Multi-Digit Number by a One-Digit Number - Partial Quotients	MGSE5.NBT.6
	B) Divide a Multi-Digit Number by a One-Digit Number - Standard Algorithm	
3-3 Dividing by Two-Digit Numbers	A) Divide Multi-Digit Numbers - Partial Quotients	MGSE5.NBT.6
	B) Divide Multi-Digit Numbers - Standard Algorithm	
3-4 Horizontal Division	A) Equivalent Forms of Division	MGSE5.NBT.6, MGSE5.NF.3
	B) Horizontal Division	

Chapter 4 Expressions and the Order of Operations

Lesson	Topic	GA Standards of Excellence
4-1 Whole Number Order of Operations	A) Order of Operations	MGSE5.OA.1
4-2 Writing Expressions	A) Addition and Subtraction Expressions	MGSE5.OA.1, MGSE5.OA.2
	B) Multiplication and Division Expressions	
	C) Power Expressions	
	D) Expressions with More Than One Operation	

Knowre Math: Grade 5 Curriculum

Chapter 5 Decimal Number Sense

Lesson	Topic	GA Standards of Excellence
5-1 Place Value: Decimals	A) Place Value	MGSE5.NBT.1, MGSE5.NBT.2, MGSE5.NBT.3.a
	B) Reading and Writing Decimals	
	C) Place Value Relationships	
	D) Expanded Form	
5-2 Comparing and Ordering Decimals	A) Modeling Decimals	MGSE5.NBT.3.b
	B) Using Models to Compare Decimals	
	C) Comparing Decimals	
5-3 Rounding Decimals and Estimating	A) Rounding Decimals	MGSE5.NBT.4
	B) Estimating with Decimals by Rounding to the Nearest Whole	

Chapter 6 Adding and Subtracting Decimals

Lesson	Topic	GA Standards of Excellence
6-1 Using Models to Add Decimals	A) Decimal Addition - Models	MGSE5.NBT.7
6-2 Adding Decimals	A) Adding Decimals - Standard Algorithm	MGSE5.NBT.7
	B) Horizontal Addition of Decimals	
6-3 Using Models to Subtract Decimals	A) Decimal Subtraction - Models	MGSE5.NBT.7
6-4 Subtracting Decimals	A) Subtracting Decimals - Standard Algorithm	MGSE5.NBT.7
	B) Horizontal Subtraction of Decimals	

Knowre Math: Grade 5 Curriculum

Chapter 7 Multiplying and Dividing Decimals

Lesson	Topic	GA Standards of Excellence
7-1 Multiplying a Decimal and a Power of Ten	A) Patterns in Zeros - Decimal Multiplication	MGSE5.NBT.2, MGSE5.NBT.7
7-2 Multiplying Decimals	A) Patterns in Zeros - Decimal Multiplication	MGSE5.NBT.7
	B) Decimal Multiplication - Standard Algorithm	
	C) Horizontal Multiplication of Decimals	
7-3 Dividing a Decimal and a Power of Ten	A) Patterns in Zeros - Decimal Division	MGSE5.NBT.2, MGSE5.NBT.7
7-4 Dividing Decimals	A) Dividing by a Whole Number	MGSE5.NBT.7
	B) Dividing by a Decimal	
	C) Horizontal Division of Decimals	

Chapter 8 Fraction Basics

Lesson	Topic	GA Standards of Excellence
8-1 Simplifying Fractions	A) Factors of Numbers	MGSE4.OA.4, 4.NF.1
	B) Greatest Common Factor	
	C) Simplifying Fractions	
8-2 LCM and Equivalent Fractions	A) Multiples	MGSE4.OA.4, 4.NF.1
	B) Least Common Multiple	
	C) Equivalent Fractions	
8-3 Comparing and Ordering Fractions	A) Comparing Fractions	MGSE4.NF.2
	B) Ordering Fractions	
8-4 Fraction/Decimal Equivalents	A) Using Place Value to Write Decimals as Fractions	MGSE4.NF.2
	B) Using Place Value to Write Fractions as Decimals	

Knowre Math: **Grade 5** Curriculum

Chapter 9 Fraction Operations

Lesson	Topic	GA Standards of Excellence
9-1 Adding Fractions	A) Add Fractions - Common Denominators	MGSE5.NF.1, MGSE5.NF.2
	B) Add Whole Numbers and Fractions	
	C) Add Mixed Numbers - Common Denominators	
	D) Add Fractions - Different Denominators	
	E) Add Mixed Numbers - Different Denominators	
9-2 Subtracting Fractions	A) Subtract Fractions - Common Denominators	MGSE5.NF.1, MGSE5.NF.2
	B) Subtract Whole Numbers from Mixed Numbers	
	C) Subtract Mixed Numbers - Common Denominators	
	D) Subtract Fractions - Different Denominators	
	E) Subtract Fractions from Mixed Numbers - Different Denominators	
	F) Subtract a Fraction from a Whole Number	
9-3 Using Models and Reasoning to Multiply Fractions	A) Compare Size of Product to Size of Factor	MGSE5.NF.4.a, MGSE5.NF.4.b, MGSE5.NF.5.a, MGSE5.NF.5.b, MGSE5.NF.6
	B) Fraction Multiplication - Models	
9-4 Multiplying Fractions	A) Multiplying Fractions	MGSE5.NF.4.a, MGSE5.NF.6
	B) Multiplying Fractions and Whole Numbers	
	C) Multiplying with Mixed Numbers	
9-5 Dividing Fractions	A) Compare Size of Quotient to Size of Dividend	MGSE5.NF.7.a, MGSE5.NF.7.b, MGSE5.NF.7.c
	B) Fraction Division - Models	
	C) Relationship Between Multiplication and Division	
	D) Reciprocals	
	E) Division with Unit Fractions	

Knowre Math: Grade 5 Curriculum

Chapter 10 Conversions

Lesson	Topic	GA Standards of Excellence
10-1 Customary Length Conversions	A) Customary Length Conversions	MGSE5.MD.1
10-2 Customary Volume and Weight Conversions	A) Customary Volume Conversions	MGSE5.MD.1
	B) Customary Weight Conversions	
10-3 Metric Length Conversions	A) Metric Length Conversions	MGSE5.MD.1
10-4 Metric Volume and Mass Conversions	A) Metric Volume Conversions	MGSE5.MD.1
	B) Metric Mass Conversions	
10-5 Time Conversions	A) Time Conversions	MGSE5.MD.1

Chapter 11 Coordinate Planes and Line Plots

Lesson	Topic	GA Standards of Excellence
11-1 Coordinate Planes	A) Parts of the Coordinate Plane	MGSE5.G.1, MGSE5.G.2
	B) Graphing Points on the Coordinate Plane	
	C) Writing Points as Ordered Pairs	
11-2 Patterns and Graphing	A) Tables and Ordered Pairs	MGSE5.OA.3
	B) Writing Rules from Patterns	
	C) Using Rules to Complete Tables and Graphs	
	D) Using Patterns to Complete Tables and Graphs	
	E) Writing Rules from Tables and Graphs	
11-3 Line Plots	A) Line Plots and Data Sets	MGSE5.MD.2
	B) Interpreting Data in Line Plots	

Knowre Math: **Grade 5** Curriculum

Chapter 12 Polygons and Prisms

Lesson	Topic	GA Standards of Excellence
12-1 Classifying Polygons	A) Polygons	MGSE5.G.3
	B) Congruent Segments and Angles	
	C) Regular Polygons	
12-2 Classifying Triangles	A) Using Angle Measures to Classify Triangles	MGSE5.G.3,
	B) Using Side Lengths to Classify Triangles	MGSE5.G.4
12-3 Classifying Quadrilaterals	A) Attributes of Special Quadrilaterals	MGSE5.G.3, MGSE5.G.4
	B) Classifying Parallelograms	
	C) Classifying Quadrilaterals	
12-4 Volumes of Rectangular Prisms	A) Using Unit Cubes to Find the Volume of a Solid	MGSE5.MD.3.a, MGSE5.MD.3.b, MGSE5.MD.4, MGSE5.MD.5.a, MGSE5.MD.5.b, MGSE5.MD.5.c
	B) Multiplying Length, Width, and Height to Find the Volume of a Rectangular Prism	
	C) Multiplying Area of Base and Height to Find the Volume of a Rectangular Prism	