



Math Connects

Concepts, Skills, and Problem Solving

Course 1

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REVERSE CORRELATION

Lesson	Grade Level Expectations
Unit 1 Numbers, Operations, and Statistics	
Chapter 1 Algebra: Number Patterns and Functions	
1-1 A Plan for Problem Solving	Number and Operations 3A
1-2 Prime Factors	Number and Operations 1C
1-3 Powers and Exponents	Number and Operations 1C, 2D
1-4 Order of Operations	Number and Operations 2C, 3C
1-5 Algebra: Variables and Expressions	Algebraic Relationships 2A, 3A
Explore 1-6 Graphing Calculator Lab: Function Machines	Algebraic Relationships 1C

Lesson	Grade Level Expectations
1-6 Algebra: Functions	Algebraic Relationships 1D
1-7 PSI: Guess and Check	Number and Operations 3D
Reading to Solve Problems: Topic Sentences	There are no state-mandated GLEs for this topic.
1-8 Algebra: Equations	Algebraic Relationships 2A
Explore 1-9: Algebra Lab: Writing Formulas	Algebraic Relationships 1A, 1B
1-9 Algebra: Area Formulas	Measurement 2C
Chapter 2 Statistics and Graphs	
2-1 PSI: Make a Table	Algebraic Relationships 1B, 1C
Reading to Solve Problems: Large Numbers	There are no state-mandated GLEs for this topic..
2-2 Bar Graphs and Line Graphs	Data and Probability 1B, 1C
Extend 2-2: Spreadsheet Lab: Double-Line and Bar-Graphs	Data and Probability 1C, 2B
2-3 Interpret Line Graphs	Data and Probability 1C, 3A
2-4 Stem-and-Leaf Plots	Data and Probability 1C
2-5 Line Plots	Data and Probability 1B, 1C
2-6 Mean	Data and Probability 2A
Extend 2-6 Spreadsheet Lab: Spreadsheets and Mean	Data and Probability 2A
2-7 Median, Mode, and Range	Data and Probability 2A
2-8 Selecting an Appropriate Display	Data and Probability 2B
Extend 2-8 Statistics Lab: Collecting Data to Solve a Problem	Data and Probability 1A

Lesson	Grade Level Expectations
2-9 Integers and Graphing	Number and Operations 1A
Unit 2 number and Operations: Decimals and Fractions	
Chapter 3 Operations with Decimals	
3-1 Representing Decimals	Number and Operations 1C
3-2 Comparing and Ordering Decimals	Number and Operations 1A
3-3 Rounding Decimals	Number and Operations 3A, 3D
3-4 Estimating Sums and Differences	Number and Operations 3A, 3D
Explore 3-5 Math Lab: Adding and Subtracting Decimals Using Models	Number and Operations 3B
3-5 Adding and Subtracting Decimals	Number and Operations 3B
Explore 3-6 Math Lab: Multiplying Decimals by Whole Numbers	Number and Operations 2B, 3C
3-6 Multiplying Decimals by Whole Numbers	Number and Operations 2B, 3C
Explore 3-7 Math Lab: Multiplying Decimals	Number and Operations 2B, 3C
3-7 Multiplying Decimals	Number and Operations 2B, 3C
3-8 Dividing Decimals by Whole Numbers	Number and Operations 2B, 3C
Explore 3-9 Math Lab: Dividing by Decimals	Number and Operations 2B, 3C
3-9 Dividing by Decimals	Number and Operations 2B, 3C
3-10 PSI: Reasonable Answers	Number and Operations 3D
Reading to Solve Problems: Make a Diagram	Data and Probability 1B

Lesson	Grade Level Expectations
Chapter 4 Fractions and Decimals	
4-1 Greatest Common Factor	Number and Operations 1C
Explore 4-2 Math Lab: Equivalent Fractions	Number and Operations 1B
4-2 Simplifying Fractions	Number and Operations 1B, 1C
4-3 Mixed Numbers and Improper Fractions	Number and Operations 1B, 1C
4-4 PSI: Make an Organized List	Data and Probability 1B
4-5 Least Common Multiple	Number and Operations 1B
4-6 Comparing and Ordering Fractions	Number and Operations 1A, 1B
4-7 Writing Decimals as Fractions	Number and Operations 1B
4-8 Writing Fractions as Decimals	Number and Operations 1B
4-9 Algebra: Ordered Pairs and Functions	Geometric and Spatial Relationships 2A
Chapter 5 Operations with Fractions	
Explore 5-1 Math Lab: Rounding Fractions	Number and Operations 3A, 3D
5-1 Rounding Fractions and Mixed Numbers	Number and Operations 3A, 3D
5-2 PSI: Act it Out	Algebraic Relationships 3A
5-3 Adding and Subtracting Fractions with Like Denominators	Number and Operations 3B, 3C
Explore 5-4 Math Lab: Unlike Denominators	Number and Operations 3B, 3C

Lesson	Grade Level Expectations
5-4 Adding and Subtracting Fractions with Unlike Denominators	Number and Operations 3B, 3C
Reading to Solve Problems: Meaning of Subtraction	Number and Operations 2A
5-5 Adding and Subtracting Mixed Numbers	Number and Operations 3B, 3C
5-6 Estimating Products of Fractions	Number and Operations 3D
Explore 5-7 Math Lab: Multiplying Fractions	Number and Operations 2B, 3C
5-7 Multiplying Fractions	Number and Operations 2B, 3C
5-8 Multiplying Mixed Numbers	Number and Operations 2B, 3C
Explore 5-9 Math Lab: Dividing Fractions	Number and Operations 2B, 3C
5-9 Dividing Fractions	Number and Operations 2B, 3C
5-10 Dividing Mixed Numbers	Number and Operations 2B, 3C
Unit 3 Patterns, Relationships, and Algebraic Thinking	
Chapter 6 Ration, Proportion, and Functions	
6-1 Ratios and Rates	Number and Operations 3E Algebraic Relationships 4A
Extend 6-1 Math Lab: Ratios and Tangrams	Number and Operations 3E
6-2 Ratio Tables	Number and Operations 3E
Extend 6-2 Graphing Calculator Lab: Ratio Tables	Number and Operations 3E
6-3 Proportions	Number and Operations 3E Algebraic Relationships 4A

Lesson	Grade Level Expectations
6-4 Algebra: Solving Proportions	Number and Operations 3E
6-5 PSI: Look for a Pattern	Algebraic Relationships 1C
6-6 Sequences and Expressions	Algebraic Relationships 1C Algebraic Relationships 3A
6-7 Proportions and Equations	Algebraic Relationships 2A
Extend 6-7 Graphing Calculator Lab: Graphing Proportional Relationships	Number and Operations 3E
Chapter 7 Percent and Probability	
Explore 7-1 Math Lab: Modeling Percents	Number and Operations 1B
7-1 Percents and Fractions	Number and Operations 1B
7-2 Circle Graphs	Data and Probability 1C
Reading to Solve Problems: Draw a Picture	There are no state-mandated GLEs for this topic.
7-3 Percents and Decimals	Number and Operations 1B
7-4 Probability	Data and Probability 4A
Extend 7-4 Probability Lab: Experimental Probability	Data and Probability 4A
7-5 Sample Spaces	Data and Probability 4A
7-6 Making Predictions	Data and Probability 3A
7-7 PSI: Solve a Simpler Problem	There are no state-mandated GLEs for this topic.
7-8 Estimating with Percents	Number and Operations 3D

Lesson	Grade Level Expectations
Unit 4 Measurement and Geometry	
Chapter 8 Systems of Measurement	
8-1 Length in the Customary System	Measurement 2E
8-2 Capacity and Weight in the Customary System	Measurement 2E
Explore 8-3 Measurement Lab: The Metric System	Measurement 1A, 2A
8-3 Length in the Metric System	Measurement 1A, 2A
8-4 Mass and Capacity in the Metric System	Measurement 1A, 2A
8-5 PSI: Use Benchmarks	Geometric and Spatial Relationships 4B Measurement 2A
8-6 Changing Metric Units	Measurement 2E
8-7 Measures of Time	Measurement 1C
8-8 Measures of Temperature	Measurement 2A
Extend 8-8 Measurement Lab: Using Appropriate Units and Tools	Measurement 1A, 2A
Chapter 9 Geometry: Angles and Polygons	
9-1 Measuring Angles	Measurement 2B
9-2 Estimating and Drawing Angles	Geometric and Spatial Relationships 4B Measurement 2B
9-3 Angle Relationships	Measurement 2B, 2E
Explore 9-4 Geometry Lab: Angles in Triangles	Geometric and Spatial Relationships 4B

Lesson	Grade Level Expectations
9-4 Triangles	Geometric and Spatial Relationships 1A, 1B
Explore 9-5 Geometry Lab: Angles in Quadrilaterals	Geometric and Spatial Relationships 4B
9-5 Quadrilaterals	Geometric and Spatial Relationships 1A, 1B
9-6 PSI: Draw a Diagram	Geometric and Spatial Relationships 4B
9-7 Similar and Congruent Figures	Geometric and Spatial Relationships 1A
Extend 9-7 Geometry Lab: Tessellations	Geometric and Spatial Relationships 4B
Chapter 10 Measurement: Perimeter, Area, and Volume	
Explore 10-1 Measurement Lab: Area and Perimeter	Measurement 1A
10-1 Perimeter	Measurement 2C
Explore 10-2 Measurement Lab: Circumference	Measurement 2C
10-2 Circles and Circumference	Geometric and Spatial Relationships 1A
10-3 Area of Parallelograms	Measurement 2C
Explore 10-4 Measurement Lab: Area of Triangles	Measurement 2C
10-4 Area of Triangles	Measurement 2C
10-5 PSI: Make a Model	Geometric and Spatial Relationships 4B
10-6 Volume of Rectangular Prisms	Measurement 2C
Explore 10-7 Geometry Lab: Using a Net to Build a Cube	Geometric and Spatial Relationships 4A
10-7 Surface Area of Rectangular Prisms	Measurement 2C

Lesson	Grade Level Expectations
Extend 10-7 Measurement Lab: Selecting Formulas and Units	Measurement 1A
Unit 5 number, Operations, and Algebraic Thinking	
Chapter 11 Integers and Transformations	
11-1 Ordering Integers	Number and Operations 1A
Explore 11-2 Algebra Lab: Zero Pairs	Number and Operations 2A
11-2 Adding Integers	Number and Operations 2B, 2D
11-3 Subtracting Integers	Number and Operations 2B, 2D
11-4 Multiplying Integers	Number and Operations 2B, 2D
11-5 PSI: Work Backward	There are no state-mandated GLEs for this topic.
11-6 Dividing Integers	Number and Operations 2B, 2D
11-7 The Coordinate Plane	Geometric and Spatial Relationships 2A
11-8 Translations	Geometric and Spatial Relationships 3A
11-9 Reflections	Geometric and Spatial Relationships 3A
11-10 Rotations	Geometric and Spatial Relationships 3A Geometric and Spatial Relationships 3C
Chapter 12 Algebra: Properties and Equations	
Explore 12-1 Algebra Lab: The Distributive Property	Algebraic Relationships 2B Number and Operations 2C
12-1 The Distributive Property	Algebraic Relationships 2B Number and Operations 2C

Lesson	Grade Level Expectations
12-2 Simplifying Algebraic Expressions	Algebraic Relationships 2B Number and Operations 2C
Explore 12-3 Algebra Lab: Solving Addition Equations Using Models	Algebraic Relationships 3A
12-3 Solving Addition Equations	Algebraic Relationships 2A
Explore 12-4 Algebra Lab: Solving Subtraction Equations Using Models	Algebraic Relationships 3A
12-4 Solving Subtraction Equations	Algebraic Relationships 2A
Extend 12-4 Algebra Lab: Solving Inequalities Using Models	Algebraic Relationships 3A
12-5 Solving Multiplication Equations	Algebraic Relationships 2A
12-6 PSI: Choose the Best Method of Computation	There are no state-mandated GLEs for this topic.
Looking Ahead 1: Negative Rational Numbers	Number and Operations 2D
Looking Ahead 2: Two-Step Equations	Algebraic Relationships 3A
Looking Ahead 3: Angle and Line Relationships	Geometric and Spatial Relationships 1A, 1B
Looking Ahead 4: Area of Circles	Measurement 2C
Looking Ahead 5: Surface Area and Volume of Pyramids and Cylinders	Measurement 2C
Looking Ahead 6: Histograms	Data and Probability 1C