Arizona Grade 6 Teacher Planning Guide

A complete 140-day course aligned to the Arizona sixth-grade standards placemat supplied in the project folder. Use the student workbook for teaching and assessment and the separate answer key for feedback and scoring.

Structure: Units 1–9 last 15 days each. Every unit has 12 teaching days, quizzes on its fifth and tenth days, and a 20-question test on its fifteenth day. Unit 10 lasts five days and ends with the Day 140 quiz. The totals are 112 lessons, 19 five-question quizzes, and 9 twenty-question tests.

Every lesson has two worked examples and ten numbered classwork problems. Teaching notes and classwork occupy separate pages so students have room to calculate and draw. Use additional graph-paper copies for longer visual tasks.

Use the day-by-day plans and the standards coverage index to find instruction. Page references below are PDF page numbers, including the cover pages. Assessment standards are also attached to individual questions in the editable curriculum data.

The course follows a broad computational-to-algebraic progression and then applies those ideas in geometry and statistics. Units 1–7 provide 105 days for major-cluster work; geometry, statistics, and final applications provide 35 days for supporting-cluster work. This is a 75%/25% pacing allocation; adjust minutes based on student needs.

The full course is designed for teacher-led instruction. Reading an example is followed by discussion, representation, independent work, and feedback; ten questions alone are not intended to fill an entire period.

Teaching and Assessment Routines

Suggested 50-minute lesson: 5 minutes of retrieval or a short number talk; 12 minutes to teach and discuss the two worked examples; 5 minutes of guided modeling; 23 minutes for classwork; 5 minutes to compare methods and check understanding. Use classwork 10 as the exit discussion when needed.

Lesson progression: problems 1–3 establish the procedure or concept; 4–6 add connected steps; 7–8 require explanation or a visual representation; 9–10 apply or justify the skill. Some representation tasks retain the same structure while numeric complexity and explanation demands increase. Do not rush students solely to reach the final items.

Quiz days: allow about 20–25 minutes for the five questions, then use the remaining time for feedback, error analysis, and guided correction. No new material is needed on an assessment day. Test days: allow a full period; finish model-heavy work in an extended block if needed.

Review policy: the first question on every quiz and the first four on every test review the immediately previous unit. Unit 1 uses fifth-grade prerequisites because there is no previous unit. Current-unit questions use only lessons taught before the assessment; quiz items sample the most recent four lessons, and tests include every teaching lesson in the unit.

Difficulty rises through the review block and through the current-unit block. Because these blocks sample different skills, difficulty is a teaching judgment rather than a calibrated measurement. All questions are open response, with subparts retained under a single question number.

Corrective teaching: use fraction strips before reciprocal procedures; place decimals in a place-value chart; draw tape diagrams before ratio calculations; balance equations physically before using inverse operations; separate square units from cubic units; display actual class data before computing summary statistics.

Access supports: read directions aloud, separate multi-part instructions, enlarge grids, and allow manipulatives. Keep the mathematical target intact. Extension: ask students to explain an alternate method, write a related problem, or give a counterexample.

Arizona Content Notes and Mathematical Practices

Negative rational numbers in this course are integers or fractions with denominators 2, 3, 4, 5, or 10. Signed-number operations are not introduced as a separate seventh-grade topic. Coordinate-distance tasks use points sharing an x- or y-coordinate.

GCF inputs stay at or below 100 and LCM inputs at or below 12. Factoring sums uses the greatest common factor so the remaining addends are relatively prime. The fraction-multiplication lessons on Days 16–17 are readiness work supporting 6.NS.A.1; division and modeling provide direct evidence of that standard afterward.

One-step equation work includes $x + p = q$, $x - p = q$, $px = q$, and $x/p = q$ with nonnegative rational values. Inequalities include $>$, $<$, $\geq$, and $\leq$ and the distinction between a number-line solution set and whole-number restrictions from context.

For quartiles, sort the data and exclude the overall median from both halves when the count is odd. Then take the medians of the two halves. Keep this convention consistent in all student and teacher work.

6.MP.1 Make sense and persevere: students choose a model, check a result, and revise. 6.MP.2 Reason quantitatively: students define quantities and interpret units in contexts.

6.MP.3 Construct and critique arguments: use the explanation, counterexample, and error-analysis items. 6.MP.4 Model with mathematics: use fraction bars, tapes, equations, nets, and statistical displays.

6.MP.5 Use tools strategically: choose fraction strips, rulers, grids, or a calculator for checking. 6.MP.6 Attend to precision: label axes, units, and variables and simplify answers.

6.MP.7 Use structure: connect common factors, distribution, and equivalent expressions. 6.MP.8 Notice repeated reasoning: describe patterns in ratio tables, conversion factors, and input-output rules. These practices are routines across the course, rather than isolated chapters.

Whole Numbers and Decimals

Days 1–15. Spectrum companion chapter 1. Student and key references are PDF page numbers.

Day 1 Lesson 1 Long Division and Place Value
Student p. 4–5 | Key p. 2 | 6.NS.B.2

Day 2 Lesson 2 Quotients with Zero Digits
Student p. 6–7 | Key p. 3 | 6.NS.B.2

Day 3 Lesson 3 Adding Decimals
Student p. 8–9 | Key p. 4 | 6.NS.B.3

Day 4 Lesson 4 Subtracting Decimals
Student p. 10–11 | Key p. 5 | 6.NS.B.3

Day 5 Quiz 1
Student p. 12 | Key p. 6 | Grade 5 prerequisite, 6.NS.B.2, 6.NS.B.3

Day 6 Lesson 5 Multiplying Decimals
Student p. 13–14 | Key p. 7 | 6.NS.B.3

Day 7 Lesson 6 Decimal Products in Context
Student p. 15–16 | Key p. 8 | 6.NS.B.3

Day 8 Lesson 7 Dividing by Decimals
Student p. 17–18 | Key p. 9 | 6.NS.B.3

Day 9 Lesson 8 Decimal Quotients and Checks
Student p. 19–20 | Key p. 10 | 6.NS.B.3

Day 10 Quiz 2
Student p. 21 | Key p. 11 | Grade 5 prerequisite, 6.NS.B.3

Day 11 Lesson 9 Greatest Common Factors
Student p. 22–23 | Key p. 12 | 6.NS.B.4a

Day 12 Lesson 10 Least Common Multiples
Student p. 24–25 | Key p. 13 | 6.NS.B.4b

Day 13 Lesson 11 Factoring Sums
Student p. 26–27 | Key p. 14 | 6.NS.B.4c

Day 14 Lesson 12 Division with Remainders in Context
Student p. 28–29 | Key p. 15 | 6.NS.B.2

Day 15 Unit 1 Test
Student p. 30–32 | Key p. 16 | Grade 5 prerequisite, 6.NS.B.2, 6.NS.B.3, 6.NS.B.4a, 6.NS.B.4b, 6.NS.B.4c

Fraction Operations and Models

Days 16–30. Spectrum companion chapter 2. Student and key references are PDF page numbers.

Day 16 Lesson 1 Fraction Products as Preparation
Student p. 33–34 | Key p. 18 | 6.NS.A.1

Day 17 Lesson 2 Mixed Number Products
Student p. 35–36 | Key p. 19 | 6.NS.A.1

Day 18 Lesson 3 Equal Groups in Fraction Bars
Student p. 37–38 | Key p. 20 | 6.NS.A.1

Day 19 Lesson 4 Partial Groups in Fraction Bars
Student p. 39–40 | Key p. 21 | 6.NS.A.1

Day 20 Quiz 1
Student p. 41 | Key p. 22 | 6.NS.B.2, 6.NS.A.1

Day 21 Lesson 5 Fraction Division and Reciprocals
Student p. 42–43 | Key p. 23 | 6.NS.A.1

Day 22 Lesson 6 Checking Fraction Quotients
Student p. 44–45 | Key p. 24 | 6.NS.A.1

Day 23 Lesson 7 Dividing Mixed Numbers
Student p. 46–47 | Key p. 25 | 6.NS.A.1

Day 24 Lesson 8 Mixed Number Quotients and Checks
Student p. 48–49 | Key p. 26 | 6.NS.A.1

Day 25 Quiz 2
Student p. 50 | Key p. 27 | 6.NS.B.3, 6.NS.A.1

Day 26 Lesson 9 Interpreting Fraction Division Stories
Student p. 51–52 | Key p. 28 | 6.NS.A.1

Day 27 Lesson 10 Full Containers and Leftovers
Student p. 53–54 | Key p. 29 | 6.NS.A.1

Day 28 Lesson 11 Missing Factors and Quotients
Student p. 55–56 | Key p. 30 | 6.NS.A.1

Day 29 Lesson 12 Explaining Fraction Division
Student p. 57–58 | Key p. 31 | 6.NS.A.1

Day 30 Unit 2 Test
Student p. 59–61 | Key p. 32 | 6.NS.B.3, 6.NS.B.4a, 6.NS.B.2, 6.NS.A.1

Ratios and Measurement

Days 31–45. Spectrum companion chapter 3. Student and key references are PDF page numbers.

Day 31 Lesson 1 Ratio Language and Order
Student p. 62–63 | Key p. 34 | 6.RP.A.1

Day 32 Lesson 2 Parts and the Whole
Student p. 64–65 | Key p. 35 | 6.RP.A.1

Day 33 Lesson 3 Tape Diagrams and Totals
Student p. 66–67 | Key p. 36 | 6.RP.A.3a

Day 34 Lesson 4 Equivalent Ratio Tables
Student p. 68–69 | Key p. 37 | 6.RP.A.3a

Day 35 Quiz 1
Student p. 70 | Key p. 38 | 6.NS.A.1, 6.RP.A.1, 6.RP.A.3a

Day 36 Lesson 5 Missing Values in Ratio Tables
Student p. 71–72 | Key p. 39 | 6.RP.A.3a

Day 37 Lesson 6 Double Number Lines
Student p. 73–74 | Key p. 40 | 6.RP.A.3a

Day 38 Lesson 7 Comparing Mixtures
Student p. 75–76 | Key p. 41 | 6.RP.A.3a

Day 39 Lesson 8 Plotting Ratio Pairs
Student p. 77–78 | Key p. 42 | 6.RP.A.3a

Day 40 Quiz 2
Student p. 79 | Key p. 43 | 6.NS.A.1, 6.RP.A.3a

Day 41 Lesson 9 Ratios in Larger Batches
Student p. 80–81 | Key p. 44 | 6.RP.A.3a

Day 42 Lesson 10 Customary and Metric Conversions
Student p. 82–83 | Key p. 45 | 6.RP.A.3d

Day 43 Lesson 11 Conversions with Fractional Amounts
Student p. 84–85 | Key p. 46 | 6.RP.A.3d

Day 44 Lesson 12 Explaining Conversion Ratios
Student p. 86–87 | Key p. 47 | 6.RP.A.3d

Day 45 Unit 3 Test
Student p. 88–90 | Key p. 48 | 6.NS.A.1, 6.RP.A.1, 6.RP.A.3a, 6.RP.A.3d

Rates and Percents

Days 46–60. Spectrum companion chapter 3. Student and key references are PDF page numbers.

Day 46 Lesson 1 Unit Rates with Labels
Student p. 91–92 | Key p. 50 | 6.RP.A.2, 6.RP.A.3b

Day 47 Lesson 2 Using a Unit Rate
Student p. 93–94 | Key p. 51 | 6.RP.A.2, 6.RP.A.3b

Day 48 Lesson 3 Constant Speed
Student p. 95–96 | Key p. 52 | 6.RP.A.3b

Day 49 Lesson 4 Distance and Time
Student p. 97–98 | Key p. 53 | 6.RP.A.3b

Day 50 Quiz 1
Student p. 99 | Key p. 54 | 6.RP.A.1, 6.RP.A.2, 6.RP.A.3b

Day 51 Lesson 5 Finding Unit Prices
Student p. 100–101 | Key p. 55 | 6.RP.A.3b

Day 52 Lesson 6 Comparing Package Sizes
Student p. 102–103 | Key p. 56 | 6.RP.A.3b

Day 53 Lesson 7 Percents Fractions and Decimals
Student p. 104–105 | Key p. 57 | 6.RP.A.3c

Day 54 Lesson 8 Finding the Percent Part
Student p. 106–107 | Key p. 58 | 6.RP.A.3c

Day 55 Quiz 2
Student p. 108 | Key p. 59 | 6.RP.A.3a, 6.RP.A.3b, 6.RP.A.3c

Day 56 Lesson 9 Percent Parts in Context
Student p. 109–110 | Key p. 60 | 6.RP.A.3c

Day 57 Lesson 10 Finding the Whole
Student p. 111–112 | Key p. 61 | 6.RP.A.3c

Day 58 Lesson 11 Finding the Percent Rate
Student p. 113–114 | Key p. 62 | 6.RP.A.3c

Day 59 Lesson 12 Choosing a Percent Strategy
Student p. 115–116 | Key p. 63 | 6.RP.A.3c

Day 60 Unit 4 Test
Student p. 117–119 | Key p. 64 | 6.RP.A.3a, 6.RP.A.3d, 6.RP.A.2, 6.RP.A.3b, 6.RP.A.3c

Rational Numbers and Coordinates

Days 61–75. Spectrum companion chapter 4. Student and key references are PDF page numbers.

Day 61 Lesson 1 Signed Quantities and Zero
Student p. 120–121 | Key p. 66 | 6.NS.C.5

Day 62 Lesson 2 Opposites and Double Opposites
Student p. 122–123 | Key p. 67 | 6.NS.C.6a

Day 63 Lesson 3 Integers on Number Lines
Student p. 124–125 | Key p. 68 | 6.NS.C.6c

Day 64 Lesson 4 Negative Fractions on Number Lines
Student p. 126–127 | Key p. 69 | 6.NS.C.6c

Day 65 Quiz 1
Student p. 128 | Key p. 70 | 6.RP.A.2, 6.RP.A.3b, 6.NS.C.5, 6.NS.C.6a, 6.NS.C.6c

Day 66 Lesson 5 Comparing Negative Values
Student p. 129–130 | Key p. 71 | 6.NS.C.7a, 6.NS.C.7b

Day 67 Lesson 6 Ordering Temperatures
Student p. 131–132 | Key p. 72 | 6.NS.C.7a, 6.NS.C.7b

Day 68 Lesson 7 Absolute Value as Distance
Student p. 133–134 | Key p. 73 | 6.NS.C.7c, 6.NS.C.7d

Day 69 Lesson 8 Magnitude and Order
Student p. 135–136 | Key p. 74 | 6.NS.C.7c, 6.NS.C.7d

Day 70 Quiz 2
Student p. 137 | Key p. 75 | 6.RP.A.3c, 6.NS.C.7a, 6.NS.C.7b, 6.NS.C.7c, 6.NS.C.7d

Day 71 Lesson 9 Points in Four Quadrants
Student p. 138–139 | Key p. 76 | 6.NS.C.6b, 6.NS.C.6c

Day 72 Lesson 10 Reflections and Coordinate Signs
Student p. 140–141 | Key p. 77 | 6.NS.C.6b

Day 73 Lesson 11 Horizontal and Vertical Distances
Student p. 142–143 | Key p. 78 | 6.NS.C.8

Day 74 Lesson 12 Distances Across the Axes
Student p. 144–145 | Key p. 79 | 6.NS.C.8

Day 75 Unit 5 Test
Student p. 146–148 | Key p. 80 | 6.RP.A.3b, 6.RP.A.3c, 6.NS.C.5, 6.NS.C.6a, 6.NS.C.6c, 6.NS.C.7a, 6.NS.C.7b, 6.NS.C.7c, 6.NS.C.7d, 6.NS.C.6b, 6.NS.C.8

Expressions and Equivalence

Days 76–90. Spectrum companion chapter 5. Student and key references are PDF page numbers.

Day 76 Lesson 1 Repeated Factors and Exponents
Student p. 149–150 | Key p. 82 | 6.EE.A.1

Day 77 Lesson 2 Powers and Their Values
Student p. 151–152 | Key p. 83 | 6.EE.A.1

Day 78 Lesson 3 Order of Operations
Student p. 153–154 | Key p. 84 | 6.EE.A.1, 6.EE.A.2c

Day 79 Lesson 4 Grouping and Left to Right Operations
Student p. 155–156 | Key p. 85 | 6.EE.A.1, 6.EE.A.2c

Day 80 Quiz 1
Student p. 157 | Key p. 86 | 6.NS.C.6a, 6.EE.A.1, 6.EE.A.2c

Day 81 Lesson 5 Parts of an Expression
Student p. 158–159 | Key p. 87 | 6.EE.A.2b

Day 82 Lesson 6 Words to Expressions
Student p. 160–161 | Key p. 88 | 6.EE.A.2a, 6.EE.B.6

Day 83 Lesson 7 Expressions for Costs
Student p. 162–163 | Key p. 89 | 6.EE.A.2a, 6.EE.B.6

Day 84 Lesson 8 Substitution and Evaluation
Student p. 164–165 | Key p. 90 | 6.EE.A.2c

Day 85 Quiz 2
Student p. 166 | Key p. 91 | 6.NS.C.7c, 6.NS.C.7d, 6.EE.A.2b, 6.EE.A.2a, 6.EE.B.6, 6.EE.A.2c

Day 86 Lesson 9 Evaluating Formulas
Student p. 167–168 | Key p. 92 | 6.EE.A.2c

Day 87 Lesson 10 Distributing a Factor
Student p. 169–170 | Key p. 93 | 6.EE.A.3

Day 88 Lesson 11 Combining Like Terms
Student p. 171–172 | Key p. 94 | 6.EE.A.3

Day 89 Lesson 12 Proving or Disproving Equivalence
Student p. 173–174 | Key p. 95 | 6.EE.A.4

Day 90 Unit 6 Test
Student p. 175–177 | Key p. 96 | 6.NS.C.6c, 6.NS.C.7a, 6.NS.C.7b, 6.NS.C.6b, 6.NS.C.8, 6.EE.A.1, 6.EE.A.2c, 6.EE.A.2b, 6.EE.A.2a, 6.EE.B.6, 6.EE.A.3, 6.EE.A.4

Equations Inequalities and Relationships

Days 91–105. Spectrum companion chapter 5. Student and key references are PDF page numbers.

Day 91 Lesson 1 Testing Equation Solutions
Student p. 178–179 | Key p. 98 | 6.EE.B.5

Day 92 Lesson 2 Solving Addition Equations
Student p. 180–181 | Key p. 99 | 6.EE.B.7

Day 93 Lesson 3 Solving Subtraction Equations
Student p. 182–183 | Key p. 100 | 6.EE.B.7

Day 94 Lesson 4 Solving Multiplication Equations
Student p. 184–185 | Key p. 101 | 6.EE.B.7

Day 95 Quiz 1
Student p. 186 | Key p. 102 | 6.EE.A.1, 6.EE.B.5, 6.EE.B.7

Day 96 Lesson 5 Solving Division Equations
Student p. 187–188 | Key p. 103 | 6.EE.B.7

Day 97 Lesson 6 One Step Equation Models
Student p. 189–190 | Key p. 104 | 6.EE.B.6, 6.EE.B.7

Day 98 Lesson 7 Writing and Graphing Inequalities
Student p. 191–192 | Key p. 105 | 6.EE.B.8

Day 99 Lesson 8 Testing Inequality Solutions
Student p. 193–194 | Key p. 106 | 6.EE.B.5, 6.EE.B.8

Day 100 Quiz 2
Student p. 195 | Key p. 107 | 6.EE.A.2c, 6.EE.B.7, 6.EE.B.6, 6.EE.B.8, 6.EE.B.5

Day 101 Lesson 9 Endpoints and Infinite Solutions
Student p. 196–197 | Key p. 108 | 6.EE.B.8

Day 102 Lesson 10 Dependent and Independent Variables
Student p. 198–199 | Key p. 109 | 6.EE.C.9

Day 103 Lesson 11 Rules Tables and Graphs
Student p. 200–201 | Key p. 110 | 6.EE.C.9

Day 104 Lesson 12 Interpreting Input Output Patterns
Student p. 202–203 | Key p. 111 | 6.EE.C.9

Day 105 Unit 7 Test
Student p. 204–206 | Key p. 112 | 6.EE.A.1, 6.EE.A.2c, 6.EE.A.2a, 6.EE.B.6, 6.EE.A.4, 6.EE.B.5, 6.EE.B.7, 6.EE.B.8, 6.EE.C.9

Area Volume and Surface Area

Days 106–120. Spectrum companion chapter 6. Student and key references are PDF page numbers.

Day 106 Lesson 1 Triangle Areas by Decomposition
Student p. 207–208 | Key p. 114 | 6.G.A.1

Day 107 Lesson 2 Triangle Heights and Fractional Measures
Student p. 209–210 | Key p. 115 | 6.G.A.1

Day 108 Lesson 3 Parallelograms and Trapezoids
Student p. 211–212 | Key p. 116 | 6.G.A.1

Day 109 Lesson 4 Composite Polygon Areas
Student p. 213–214 | Key p. 117 | 6.G.A.1

Day 110 Quiz 1
Student p. 215 | Key p. 118 | 6.EE.B.7, 6.G.A.1

Day 111 Lesson 5 Polygons on the Coordinate Plane
Student p. 216–217 | Key p. 119 | 6.G.A.3, 6.G.A.1

Day 112 Lesson 6 Volume with Fractional Edges
Student p. 218–219 | Key p. 120 | 6.G.A.2

Day 113 Lesson 7 Base Area and Prism Volume
Student p. 220–221 | Key p. 121 | 6.G.A.2

Day 114 Lesson 8 Packing Fractional Unit Cubes
Student p. 222–223 | Key p. 122 | 6.G.A.2

Day 115 Quiz 2
Student p. 224 | Key p. 123 | 6.EE.B.5, 6.EE.B.8, 6.G.A.3, 6.G.A.1, 6.G.A.2

Day 116 Lesson 9 Drawing and Labeling Nets
Student p. 225–226 | Key p. 124 | 6.G.A.4

Day 117 Lesson 10 Prism Surface Area
Student p. 227–228 | Key p. 125 | 6.G.A.4

Day 118 Lesson 11 Pyramid Nets and Surface Area
Student p. 229–230 | Key p. 126 | 6.G.A.4

Day 119 Lesson 12 Choosing Area Volume or Surface Area
Student p. 231–232 | Key p. 127 | 6.G.A.1, 6.G.A.2, 6.G.A.4

Day 120 Unit 8 Test
Student p. 233–235 | Key p. 128 | 6.EE.B.7, 6.EE.B.6, 6.EE.B.8, 6.EE.C.9, 6.G.A.1, 6.G.A.3, 6.G.A.2, 6.G.A.4

Statistics and Data Displays

Days 121–135. Spectrum companion chapter 7. Student and key references are PDF page numbers.

Day 121 Lesson 1 Questions That Anticipate Variability
Student p. 236–237 | Key p. 130 | 6.SP.A.1

Day 122 Lesson 2 Center Spread and Shape
Student p. 238–239 | Key p. 131 | 6.SP.A.2, 6.SP.A.3

Day 123 Lesson 3 Mean and Observation Counts
Student p. 240–241 | Key p. 132 | 6.SP.B.5a, 6.SP.B.5b, 6.SP.B.5c

Day 124 Lesson 4 Medians and Unusual Values
Student p. 242–243 | Key p. 133 | 6.SP.B.5c

Day 125 Quiz 1
Student p. 244 | Key p. 134 | 6.G.A.1, 6.SP.A.1, 6.SP.A.2, 6.SP.A.3, 6.SP.B.5a, 6.SP.B.5b, 6.SP.B.5c

Day 126 Lesson 5 Quartiles and Interquartile Range
Student p. 245–246 | Key p. 135 | 6.SP.A.3, 6.SP.B.5c

Day 127 Lesson 6 Mean Absolute Deviation
Student p. 247–248 | Key p. 136 | 6.SP.B.5c

Day 128 Lesson 7 Choosing Measures of Center
Student p. 249–250 | Key p. 137 | 6.SP.B.5d

Day 129 Lesson 8 Dot Plots on a Number Line
Student p. 251–252 | Key p. 138 | 6.SP.B.4

Day 130 Quiz 2
Student p. 253 | Key p. 139 | 6.G.A.2, 6.SP.A.3, 6.SP.B.5c, 6.SP.B.5d, 6.SP.B.4

Day 131 Lesson 9 Histograms and Intervals
Student p. 254–255 | Key p. 140 | 6.SP.B.4

Day 132 Lesson 10 Box Plots and Five Number Summaries
Student p. 256–257 | Key p. 141 | 6.SP.B.4, 6.SP.B.5c

Day 133 Lesson 11 Comparing Data Sets
Student p. 258–259 | Key p. 142 | 6.SP.A.2, 6.SP.B.5d

Day 134 Lesson 12 Writing a Complete Data Summary
Student p. 260–261 | Key p. 143 | 6.SP.B.5a, 6.SP.B.5b, 6.SP.B.5c, 6.SP.B.5d

Day 135 Unit 9 Test
Student p. 262–264 | Key p. 144 | 6.G.A.1, 6.G.A.2, 6.G.A.4, 6.SP.A.1, 6.SP.A.2, 6.SP.A.3, 6.SP.B.5a, 6.SP.B.5b, 6.SP.B.5c, 6.SP.B.5d, 6.SP.B.4

Final Applications and Review

Days 136–140. Cross-chapter final applications. Student and key references are PDF page numbers.

Day 136 Lesson 1 Designing a School Garden
Student p. 265–266 | Key p. 146 | 6.G.A.3, 6.G.A.1

Day 137 Lesson 2 Planning Storage and Packaging
Student p. 267–268 | Key p. 147 | 6.G.A.2, 6.G.A.4

Day 138 Lesson 3 Reporting Class Reading Data
Student p. 269–270 | Key p. 148 | 6.SP.A.1, 6.SP.B.5a, 6.SP.B.5b, 6.SP.B.5c, 6.SP.A.3, 6.SP.B.4, 6.SP.B.5d

Day 139 Lesson 4 Connecting Models and Explanations
Student p. 271–272 | Key p. 149 | 6.G.A.1, 6.G.A.2, 6.G.A.4, 6.SP.A.2, 6.SP.A.3, 6.SP.B.5a, 6.SP.B.5b, 6.SP.B.5c, 6.SP.B.4, 6.SP.B.5d

Day 140 Final Review Quiz
Student p. 273 | Key p. 150 | 6.SP.B.4, 6.G.A.1, 6.G.A.2, 6.SP.B.5c, 6.SP.B.5a, 6.SP.B.5b, 6.SP.B.5d

Instruction and Assessment Evidence

Summaries below paraphrase the supplied Arizona placemat. D means day and Q means question. The first assessment examples are shown; the editable data contains the complete item mapping.

6.RP.A.1 Describe multiplicative ratio relationships using clear labels and ratio language.

Teaching days 31, 32
Assessment examples D35 Q2; D35 Q3; D45 Q5

6.RP.A.2 Interpret unit rates and state what the rate per one unit means.

Teaching days 46, 47
Assessment examples D50 Q2; D50 Q3; D60 Q5

6.RP.A.3a Use tables, missing values, graphs, and comparisons of equivalent ratios.

Teaching days 33, 34, 36, 37, 38, 39, 41
Assessment examples D35 Q4; D35 Q5; D40 Q2

6.RP.A.3b Solve constant-speed and unit-pricing problems.

Teaching days 46, 47, 48, 49, 51, 52
Assessment examples D50 Q2; D50 Q3; D50 Q4

6.RP.A.3c Solve percent situations with the part, whole, or rate unknown.

Teaching days 53, 54, 56, 57, 58, 59
Assessment examples D55 Q4; D55 Q5; D60 Q11

6.RP.A.3d Convert measurements through ratio reasoning.

Teaching days 42, 43, 44
Assessment examples D45 Q14; D45 Q15; D45 Q16

6.NS.A.1 Interpret and compute fraction quotients with equations and visual models.

Teaching days 16, 17, 18, 19, 21, 22, 23, 24, 26, 27, 28, 29
Assessment examples D20 Q2; D20 Q3; D20 Q4

Instruction and Assessment Evidence

Summaries below paraphrase the supplied Arizona placemat. D means day and Q means question. The first assessment examples are shown; the editable data contains the complete item mapping.

6.NS.B.2 Use the standard algorithm to divide multi-digit whole numbers fluently.

Teaching days 1, 2, 14
Assessment examples D5 Q2; D5 Q3; D15 Q5

6.NS.B.3 Use standard algorithms for all four operations with decimals.

Teaching days 3, 4, 6, 7, 8, 9
Assessment examples D5 Q4; D5 Q5; D10 Q2

6.NS.B.4a Find greatest common factors with whole numbers no greater than 100.

Teaching days 11
Assessment examples D15 Q13; D30 Q3

6.NS.B.4b Find least common multiples with whole numbers no greater than 12.

Teaching days 12
Assessment examples D15 Q14

6.NS.B.4c Factor a sum using a common factor and the distributive property.

Teaching days 13
Assessment examples D15 Q15

6.NS.C.5 Represent opposite real-world quantities with signs and explain zero.

Teaching days 61
Assessment examples D65 Q2; D75 Q5; D75 Q17

6.NS.C.6a Recognize opposites, double opposites, and zero as its own opposite.

Teaching days 62
Assessment examples D65 Q3; D75 Q6; D75 Q18

Instruction and Assessment Evidence

Summaries below paraphrase the supplied Arizona placemat. D means day and Q means question. The first assessment examples are shown; the editable data contains the complete item mapping.

6.NS.C.6b Connect coordinate signs with quadrants and axis reflections.

Teaching days 71, 72
Assessment examples D75 Q13; D75 Q14; D90 Q3

6.NS.C.6c Locate rational numbers on number lines and coordinate planes.

Teaching days 63, 64, 71
Assessment examples D65 Q4; D65 Q5; D75 Q7

6.NS.C.7a Compare number-line positions using inequalities.

Teaching days 66, 67
Assessment examples D70 Q2; D70 Q3; D75 Q9

6.NS.C.7b Explain order comparisons in real-world contexts.

Teaching days 66, 67
Assessment examples D70 Q2; D70 Q3; D75 Q9

6.NS.C.7c Interpret absolute value as distance or magnitude.

Teaching days 68, 69
Assessment examples D70 Q4; D70 Q5; D75 Q11

6.NS.C.7d Distinguish order comparisons from comparisons of magnitude.

Teaching days 68, 69
Assessment examples D70 Q4; D70 Q5; D75 Q11

6.NS.C.8 Graph in four quadrants and use coordinates to find aligned distances.

Teaching days 73, 74
Assessment examples D75 Q15; D75 Q16; D90 Q4

Instruction and Assessment Evidence

Summaries below paraphrase the supplied Arizona placemat. D means day and Q means question. The first assessment examples are shown; the editable data contains the complete item mapping.

6.EE.A.1 Write and evaluate expressions with whole-number exponents.

Teaching days 76, 77, 78, 79
Assessment examples D80 Q2; D80 Q3; D80 Q4

6.EE.A.2a Translate operations involving numbers and variables into expressions.

Teaching days 82, 83
Assessment examples D85 Q3; D85 Q4; D90 Q10

6.EE.A.2b Name terms, sums, factors, products, quotients, and coefficients.

Teaching days 81
Assessment examples D85 Q2; D90 Q9

6.EE.A.2c Evaluate expressions and formulas in the correct operation order.

Teaching days 78, 79, 84, 86
Assessment examples D80 Q4; D80 Q5; D85 Q5

6.EE.A.3 Use operation properties to generate equivalent expressions.

Teaching days 87, 88
Assessment examples D90 Q14; D90 Q15

6.EE.A.4 Determine and justify whether expressions are equivalent.

Teaching days 89
Assessment examples D90 Q16; D105 Q4

6.EE.B.5 Use substitution to determine whether a value satisfies an equation or inequality.

Teaching days 91, 99
Assessment examples D95 Q2; D100 Q5; D105 Q5

Instruction and Assessment Evidence

Summaries below paraphrase the supplied Arizona placemat. D means day and Q means question. The first assessment examples are shown; the editable data contains the complete item mapping.

6.EE.B.6 Define and use variables for unknown or varying numbers in context.

Teaching days 82, 83, 97
Assessment examples D85 Q3; D85 Q4; D90 Q10

6.EE.B.7 Solve addition, subtraction, multiplication, and division one-step equations with nonnegative rational values.

Teaching days 92, 93, 94, 96, 97
Assessment examples D95 Q3; D95 Q4; D95 Q5

6.EE.B.8 Write and graph strict and inclusive inequalities; recognize infinitely many solutions.

Teaching days 98, 99, 101
Assessment examples D100 Q4; D100 Q5; D105 Q11

6.EE.C.9 Relate two changing quantities using equations, tables, and graphs.

Teaching days 102, 103, 104
Assessment examples D105 Q14; D105 Q15; D105 Q16

6.G.A.1 Find polygon areas through composition and decomposition.

Teaching days 106, 107, 108, 109, 111, 119, 136, 139
Assessment examples D110 Q2; D110 Q3; D110 Q4

6.G.A.2 Connect fractional unit-cube packing with right rectangular prism volume.

Teaching days 112, 113, 114, 119, 137, 139
Assessment examples D115 Q3; D115 Q4; D115 Q5

6.G.A.3 Draw coordinate polygons and calculate horizontal and vertical side lengths.

Teaching days 111, 136
Assessment examples D115 Q2; D120 Q9

Instruction and Assessment Evidence

Summaries below paraphrase the supplied Arizona placemat. D means day and Q means question. The first assessment examples are shown; the editable data contains the complete item mapping.

6.G.A.4 Draw nets and use face areas to calculate surface area.

Teaching days 116, 117, 118, 119, 137, 139
Assessment examples D120 Q13; D120 Q14; D120 Q15

6.SP.A.1 Recognize questions that anticipate variability in collected data.

Teaching days 121, 138
Assessment examples D125 Q2; D135 Q5; D135 Q17

6.SP.A.2 Describe distributions by center, spread, and overall shape.

Teaching days 122, 133, 139
Assessment examples D125 Q3; D135 Q6; D135 Q15

6.SP.A.3 Distinguish measures of center from measures of variability.

Teaching days 122, 126, 138, 139
Assessment examples D125 Q3; D130 Q2; D135 Q6

6.SP.B.4 Construct and interpret dot plots, histograms, and box plots.

Teaching days 129, 131, 132, 138, 139
Assessment examples D130 Q5; D135 Q12; D135 Q13

6.SP.B.5a Report the number of observations.

Teaching days 123, 134, 138, 139
Assessment examples D125 Q4; D135 Q7; D135 Q16

6.SP.B.5b Name the investigated attribute, measurement method, and units.

Teaching days 123, 134, 138, 139
Assessment examples D125 Q4; D135 Q7; D135 Q16

Instruction and Assessment Evidence

Summaries below paraphrase the supplied Arizona placemat. D means day and Q means question. The first assessment examples are shown; the editable data contains the complete item mapping.

6.SP.B.5c Summarize center and variability and explain patterns or unusual values in context.

Teaching days 123, 124, 126, 127, 132, 134, 138, 139
Assessment examples D125 Q4; D125 Q5; D130 Q2

6.SP.B.5d Choose center and variability measures suited to the distribution and context.

Teaching days 128, 133, 134, 138, 139
Assessment examples D130 Q4; D135 Q11; D135 Q15

Companion Book and Source Notes

Primary standards source: D:\curriculum\6th\6th-math-placement.pdf. Despite the filename, this is the Arizona Department of Education Sixth Grade Standards Placemat, May 2018, not a placement test. All five content domains are represented in the coverage index.

Additional local file: D:\curriculum\6th\6th_Grade_Math.pdf. This is a scanned sample assessment, not the standards document. It was inspected for context; its items are not reproduced here.

Optional companion: Spectrum Math Grade 6, Carson Dellosa Education, 2024, ISBN 9781483872322. The publisher's public preview identifies the edition and provides its contents and sample layouts. The older 2015 edition uses ISBN 9781483808741 and different page numbers.

Use chapter-level companion matching: Unit 1 → Chapter 1; Unit 2 → Chapter 2; Units 3–4 → Chapter 3; Unit 5 → Chapter 4; Units 6–7 → Chapter 5; Unit 8 → Chapter 6; Unit 9 → Chapter 7; Unit 10 → review across chapters. Select the matching topic in the edition you own.

The public previews, rather than a complete licensed text, informed the companion mapping and general short-instruction, worked-example, practice format. The curriculum's wording, examples, assessment items, sequence, and page design are original. No exact publisher page-by-page alignment is claimed.

The state's current standards page was checked on November 4, 2026. Its linked sixth-grade standards document carries a January 29, 2025 update and identifies essential standards. This course uses the full content in the supplied placemat rather than restricting instruction to essential assessment priorities.

Verified References

Arizona Department of Education mathematics standards

https://www.azed.gov/standards-practices/k-12standards/mathematics-standards

Arizona sixth grade standards placemat

https://www.azed.gov/sites/default/files/2025/04/grade-6-placemat-4-2018.pdf

Spectrum Math Grade 6 publisher preview 2024

https://images.carsondellosa.com/media/cd/pdfs/Activities/FR01805.pdf

Spectrum Math Grade 6 publisher sampler 2015

https://images.carsondellosa.com/media/cd/pdfs/Activities/Samplers/SpectrumMath_SampleBook_Grade6.compressed.pdf

Editable files included with the books: curriculum.json contains every day, standard, target, lecture, worked example, problem, answer, and solution note; curriculum.html is a readable editable master with answers hidden in expandable sections; pacing.csv lists the 140 days; standards_coverage.csv lists the teaching and assessment evidence. Keep teacher answers away from student copies.

Assessment counts and answer availability are checked automatically. Exact arithmetic is used for fractions, percents, and derived statistics. Final layout checks inspect page boundaries and render representative lesson, classwork, quiz, test, answer, and planning pages.