## Math Teachers Press,Inc.

4850 Park Glen Road, Minneapolis, MN 55416
phone (800) 852-2435 fax (952) 546-7502

## ARKANSAS MATH FRAMEWORK STANDARDS CORRELATED TO MOVING WITH MATH EXTENSIONS GRADE 6

|  |  | Student Book | Skill Builders |
| :---: | :---: | :---: | :---: |
|  | NUMBER SENSE |  |  |
|  | Rational Numbers |  |  |
| No.1.6.1 | Demonstrate conceptual understanding to find a specific percent of a number, using models, real-life examples or explanations |  | 29-1, 30-1 |
| No.1.6.2 | Connect various physical models and representations to the quantities they represent using number names, numerals and number words up to 10 with and without appropriate technology | 35-40 | 25-1, 29-1 |
| No.1.6.3 | Round and compare decimals to a given place value including 1000ths | 38-39 | 24-1 |
| No.1.6.4 | Convert, compare and order fractions (mixed numbers and improper fractions) decimals and percents and find their approximate location on a number line | 23-25, 35, 40 | 11-2 |
| No.1.6.5 | Recognize and identify perfect squares and their square roots |  |  |
|  | Number Theory |  |  |
| No.2.6.1 | Use divisibility rules to determine if a number is a factor of another number |  |  |
| No.2.6.2 | Apply the distributive property of multiplication over addition to simplify computations with whole numbers |  |  |
| No.2.6.3 | Apply the addition, subtraction, multiplication and division properties of equality to one step equations with whole numbers |  | 5-1, 5-2 |
| No.2.6.4 | Apply rules (conventions) for order of operations to whole numbers with and without parentheses | 4, 18 | 5-1, 5-2 |
|  | Understand Operations |  |  |
| No.2.6.5 | Model multiplication and division of fractions (including mixed numbers) and decimals using pictures and physical objects | 32-34 | 19-1, 19-2 |
|  | Computational Fluency |  |  |


|  |  | Student Book | Skill Builders |
| :---: | :---: | :---: | :---: |
| No.3.6.1 | Apply with and without appropriate technology algorithms with computational fluency to perform whole number operations | 5-6, 9-13, 18 | $\begin{aligned} & 7-1,9-1,10-1,10 \\ & 3 \end{aligned}$ |
| No.3.6.2 | Develop and analyze algorithms for computing with fractions (including mixed numbers) and decimals and demonstrate with and without technology, computational fluency in their use and justify the solution | $\begin{aligned} & 27-31,33-34,39- \\ & 42,44-49 \end{aligned}$ | $\begin{aligned} & 15-1,16-1,16-2, \\ & 17-1,17-2,18-1 \\ & 19-2,20-1 \end{aligned}$ |
| No.3.6.3 | Solve with and without appropriate technology multistep problems using a variety of methods and tools (objects, mental computation, paper and pencil) | 18, 28-32 | $\begin{aligned} & 8-1,9-1,10-1,10 \\ & 3,17-2,18-1 \end{aligned}$ |
|  | Estimation |  |  |
| No.3.6.4 | Estimate reasonable solutions to problem situations involving fractions and decimals | 21 |  |
|  | Application of Computation |  |  |
| No.3.6.5 | Find and use factorization (tree diagram) including prime factorization of composite numbers (expanded and exponential notation) to determine the greatest common factor (GCF) and least common multiple (LCM) |  |  |
| No.3.6.6 | Use proportional reasoning and ratios to represent problem situations and determine the reasonableness of solutions with and without appropriate technology |  |  |
| No.3.6.7 | Determine the percent of a number and solve related problems in real world situations (sales tax, discounts) |  | 29-1, 30-1 |
|  | ALGEBRA |  |  |
|  | Patterns, Relations and Functions |  |  |
| A.4.6.1 | Solve problems by finding the next term or missing term in a pattern or function table using real world situations | 2, 23 | 44-1 |
| A.4.6.2 | Interpret and write an algebraic rule for a one-operation function table |  | 45-5 |
|  | Expressions, Equations and Inequalities |  |  |
| A.5.6.1 | Model, write and solve one step equations by informal methods using manipulatives and appropriate technology | $\begin{aligned} & 4,6,9,11-13 \\ & 23,27-28,32,34 \\ & 39,41-45,47 \end{aligned}$ | $\begin{aligned} & 5-1,15-1,16-2 \\ & 17-1,24-1 \end{aligned}$ |
| A.5.6.2 | Write simple algebraic expressions using appropriate operations (+,-,×, $\div$ ) |  | 45-5 |


|  |  | Student Book | Skill Builders |
| :---: | :---: | :---: | :---: |
| A.5.6.3 | Evaluate algebraic expressions with one variable using appropriate properties and operations (+,-, $\times, \div$ ) |  | 45-5 |
|  | Algebraic Models and Relationships |  |  |
| A.6.6.1 | Complete with and without appropriate technology and interpret tables and line graphs that represent the relationship between two variables in quadrant 1 (time and distance) | 61 |  |
|  | Analyze Change |  |  |
| A.7.6.1 | Identify and compare situations with constant or varying rates of change | 63 | 48-1 |
|  | GEOMETRY |  |  |
|  | Characteristics of Geometric Shapes |  |  |
| G.8.6.1 | Identify 3-D geometric figures using models (rectangular prisms, cylinders, cones, pyramids and spheres) |  | 39-2 |
| G.8.6.2 | Investigate with manipulatives or grid paper what happens to the perimeter and area of a 2-D shape when the dimensions are changed (length of sides are doubled) | 56 | 38-1, 38-2 |
| G.8.6.3 | Identify, describe, draw and classify triangles as equilateral, isosceles, scalene, right, acute, obtuse and equiangular | 51 |  |
| G.8.6.4 | Draw, label and determine relationships among the radius, diameter, center and circumference of a circle | 54 | 35-1 |
| G.8.6.5 | Identify similar figures and explore their properties |  |  |
|  | Symmetry and Transformations |  |  |
| G.9.6.1 | Identify and describe line and rotational symmetry in 3D shapes, patterns and designs |  |  |
| G.9.6.2 | Describe positions and orientations of shapes under transformation (translation, reflection, and rotation) recognizing the size and shape do not change |  |  |
|  | Coordinate Geometry |  |  |
| G.10.6.1 | Use ordered pairs to plot points in Quadrant 1 | 61 |  |
| G.10.6.2 | Plot points that form the vertices of a geometric figure and draw, identify and classify the figure | 61 |  |
|  | Spatial Visualization and Models |  |  |


|  |  | Student Book | Skill Builders |
| :---: | :---: | :---: | :---: |
| G.11.6.1 | Identify 2-D patterns (nets) for 3-D solids, such as prisms, pyramids, cylinders and cones |  |  |
|  | MEASUREMENT |  |  |
|  | Attributes and Tools |  |  |
| M.12.6.1 | Identify and select appropriate units and tools from both systems to measure (angles with degrees, distance and feet/meters) | 60 | 41-1 |
| M.12.6.2 | Make conversions within the same measurement system in real world problems (hours to minutes to seconds, feet to inches, liters to milliliters, quarts to gallons, etc.) | 60 | 40-1, 41-1, 42-1 |
| M.12.6.3 | Compare and contrast the differences among linear units, square units and cubic units | 57-58 | $\begin{aligned} & 36-1,36-2,38-1 \\ & 38-2,39-1 \end{aligned}$ |
| M.13.6.1 | Solve real world problems involving one elapsed time counting forward and backward (calendar and clock) | 59 | 40-1 |
| M.13.6.2 | Determine which unit of measure or measurement tool matches the context for a problem situation | 60 | 41-1 |
| M.13.6.3 | Draw and measure distance to the nearest mm and $1 / 8$ inch accurately | 55 | 36-1, 36-2, 38-1 |
| M.13.6.4 | Establish and apply formulas to find area and perimeter of triangles, rectangles and parallelograms | 56-57 | 38-1, 38-2 |
| M.13.6.5 | Find the distance between two points on a number line |  |  |
| M.13.6.6 | Use estimation to check the reasonableness of measurements obtained from use of various instruments (including angle measures) | 60 |  |
|  | DATA ANALYSIS AND PROBABILITY |  |  |
|  | Collect, Organize and Display Data |  |  |
| $\begin{gathered} \text { DAP.14.6. } \\ 1 \end{gathered}$ | Formulate questions, design studies and collect data about a characteristic shared by 2 populations or different characteristics within one population | 19 |  |
| $\begin{gathered} \text { DAP.14.6. } \\ 2 \end{gathered}$ | Collect data and select appropriate graphical representations to display the data including Venn diagrams | 19 | 47-2 |
| $\begin{gathered} \text { DAP.14.6. } \\ 3 \end{gathered}$ | Construct and interpret graphs, using correct scale, including line graphs and double bar graphs |  | 48-1 |
|  | Data Analysis |  |  |
| DAP.15.6. $1$ | Interpret graphs such as double line graphs and circle graphs | 62-63 |  |


| DAP.15.6. | Compare and interpret information provided by <br> measures of central tendencies (mean, median and <br> mode) and measures of spread (range) | Student Book | Skill Builders |
| :---: | :--- | :--- | :--- |
| DAP.16.6. <br> $\mathbf{1}$ | Use observations about differences in data to make <br> justifiable inferences | $62-63$ | $46-1,46-2$ |
| DAP.17.6. <br> $\mathbf{1}$ | Distinguish between theoretical and experimental <br> probability |  | $47-2$ |

