SRA Mathematics Laboratory 2a
correlation to
Arkansas Mathematics Curriculum Framework
Grade 4

Strand: Number and Operations
Standard 1: Number Sense: Students shall understand numbers, ways of representing numbers, relationships among numbers and number systems.
Whole Numbers
NO.1.4.1. Recognize equivalent representations for the same *whole number* and generate them by *composing* and *decomposing* numbers.
Place Value: Whole Numbers: Cards 16, 17, 18, 19 **Representing Numbers:** Cards 74, 75, 78

Strand: Number and Operations
Standard 1: Number Sense: Students shall understand numbers, ways of representing numbers, relationships among numbers and number systems.
Whole Numbers
NO.1.4.2. Use the place-value structure of the base-ten number system and be able to represent and compare *whole* numbers to millions (using models, illustrations, symbols, *expanded notation,* and problem solving).
Place Value: Whole Numbers: Cards 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24 **Representing Numbers:** Cards 74, 75, 78, 83, 84

Strand: Number and Operations
Standard 1: Number Sense: Students shall understand numbers, ways of representing numbers, relationships among numbers and number systems.
Whole Numbers
NO.1.4.3. Use mathematical language and symbols to compare and order any *whole numbers* with and without appropriate *technology* (<, >, =).
Place Value: Whole Numbers: Cards 20, 21, 22, 23, 24 **Representing Numbers:** Cards 79, 81, 82, 83, 84 **Decimal Concepts:** Cards 215, 216, 217, 218 **Fraction Concepts:** Cards 235, 239, 240, 241, 242, 243, 244, 245, 246, 247 **Add & Subtract Fractions:** Card 260

Strand: Number and Operations
Standard 1: Number Sense: Students shall understand numbers, ways of representing numbers, relationships among numbers and number systems.
Rational Numbers
NO.1.4.4. Write a fraction to name part of a whole, part of a set, a location on a number line, and the division of *whole numbers,* using models.
Fraction Concepts: Cards 232, 233, 234, 235, 236, 237, 238, 239

Strand: Number and Operations
Standard 1: Number Sense: Students shall understand numbers, ways of representing numbers, relationships among numbers and number systems.
Rational Numbers
NO.1.4.5. Utilize models, benchmarks, and *equivalent* forms to recognize that the size of the whole determines the size of the fraction.
Fraction Concepts: Cards 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247 **Add & Subtract Fractions:** Card 260

Strand: Number and Operations
Standard 1: Number Sense: Students shall understand numbers, ways of representing numbers, relationships among numbers and number systems.
Rational Numbers
NO.1.4.6. Use the place-value structure of the base-ten number system to represent and compare decimals to hundredths (using models, illustrations, symbols, *expanded notation* and problem solving).
Decimal Concepts: Cards 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218

Strand: Number and Operations
Standard 1: Number Sense: Students shall understand numbers, ways of representing numbers, relationships among numbers and number systems.
Rational Numbers
NO.1.4.7. Write an *equivalent* decimal for a given fraction relating to money.
Decimal Concepts: Cards 210, 213

Strand: Number and Operations
Standard 1: Number Sense: Students shall understand numbers, ways of representing numbers, relationships among numbers and number systems.
Rational Numbers
NO.1.4.8. Write a fraction that is *equivalent* with the use of models.
Fraction Concepts: Cards 235, 236, 237, 238 **Add & Subtract Fractions:** Card 260

Strand: Numbers and Operations
Standard 2: Properties of Number Operations: Students shall understand meanings of operations and how they relate to one another.
Number Theory
NO.2.4.1. Develop an understanding of the *associative* and zero properties of multiplication using objects.
Basic Facts: Multiply & Divide: Cards 102, 103

Strand: Numbers and Operations
Standard 2: Properties of Number Operations: Students shall understand meanings of operations and how they relate to one another.
Number Theory
NO.2.4.2. Apply *number theory*   • **Determine if any number is odd or even.**   • **Use the terms *multiple, factor,* and divisible by in an appropriate context.**   • **Generate and use *divisibility* rules for 2, 5, and 10.**   • **Demonstrate various multiplication and division relationships.**
Basic Facts: Multiply & Divide: Cards 105, 106, 107, 110, 112   **Multiply Whole Numbers by 1 Digit:** Cards 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129   **Multiply Whole Numbers by 2 Digits:** Cards 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150   **Divide Whole Numbers by 1 Digit:** Cards 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173   **Patterns & Numbers:** Cards 196, 197, 198, 199, 200, 201, 202, 207   **Divide Whole Numbers by 2 Digits:** Cards 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259   **Add & Subtract Fractions:** Card 261

Strand: Numbers and Operations
Standard 2: Properties of Number Operations: Students shall understand meanings of operations and how they relate to one another.
Whole Number Operations
NO.2.4.3. Use conventional mathematical symbols to write *equations* for contextual problems involving multiplication.
Place Value: Whole Numbers: Cards 99, 100, 101   **Multiply Whole Numbers by 1 Digit:** Card 122

Strand: Numbers and Operations
Standard 2: Properties of Number Operations: Students shall understand meanings of operations and how they relate to one another.
Whole Number Operations
NO.2.4.4. Represent and explain division as measurement and partitive division including equal groups, related rates, price, *rectangular arrays (area model),* combinations and multiplicative comparison.
Basic Facts: Multiply & Divide: Cards 104, 105, 106, 107, 108, 109, 110, 112   **Divide Whole Numbers by 1 Digits:** Cards 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173   **Divide Whole Numbers by 2 Digits:** Cards 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259

Strand: Numbers and Operations
Standard 3: Numerical Operations and Estimation: Students shall compute fluently and make reasonable estimates.
Computational Fluency-Addition and Subtraction
NO.3.4.1. Demonstrate, with and without appropriate *technology, computational fluency,* in multi-digit addition and subtraction in contextual problems.
Add Whole Numbers: Cards 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43   **Subtract Whole Numbers:** Cards 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73

Strand: Numbers and Operations
Standard 3: Numerical Operations and Estimation: Students shall compute fluently and make reasonable estimates.
Computational Fluency-Multiplication and Division
NO.3.4.2. Demonstrate fluency with combination for multiplication and division facts (12 x 12) and use these combinations to mentally compute related problems (30 x 50).
Basic Facts: Multiply & Divide: Cards 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112 **Multiply Whole Numbers by 1 Digit:** Cards 113, 114, 115, 116 **Multiply Whole Numbers by 2 Digits:** Cards 140, 141, 142, 143

Strand: Numbers and Operations
Standard 3: Numerical Operations and Estimation: Students shall compute fluently and make reasonable estimates.
Computational Fluency-Multiplication and Division
NO.3.4.3. Attain, with and without appropriate *technology, computational fluency* in multiplication and division using contextual problems using: • **Two-digit by two-digit multiplication (larger numbers with technology).** • **Up to three-digit by two-digit division (larger numbers with technology).** • ***Strategies* for multiplication and dividing numbers.** • **Performance of operations in more than one way.** • ***Estimation* of products and quotients in appropriate situations** • ***Estimation* of products and quotients in appropriate situations.** • **Relationships between operations.**
Multiply Whole Numbers by 1 Digit: Cards 113, 14, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129 **Multiply Whole Numbers by 2 Digits:** Cards 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150 **Divide Whole Numbers by 1 Digit:** Cards 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173 **Divide Whole Numbers by 2 Digits:** Cards 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259

Strand: Numbers and Operations
Standard 3: Numerical Operations and Estimation: Students shall compute fluently and make reasonable estimates.
Application of Computation
NO.3.4.4. Solve simple problems using operations involving addition, subtraction and multiplication using a variety of methods and tools (e.g., objects, mental computations, paper and pencil and with and without appropriate *technology*).
Basic Facts: Add & Subtract: Cards 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13 **Add Whole Numbers:** Cards 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43 **Subtract Whole Numbers:** Cards 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73 **Basic Facts: Multiply & Divide:** Cards 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112 **Multiply Whole Numbers by 1 Digit:** Cards 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129 **Multiple Whole Numbers by 2 Digits:** Cards 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150 **Divide Whole Numbers by 2 Digits:** Cards 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173 **Divide Whole Numbers by 2 Digits:** Cards 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259

Strand: Numbers and Operations
Standard 3: Numerical Operations and Estimation: Students shall compute fluently and make reasonable estimates.
Estimation
NO.3.4.5. Use *estimation strategies* to solve problems and judge the reasonableness of the answer.
Add Whole Numbers: Cards 25, 37   **Subtract Whole Numbers:** Cards 55, 68   **Multiply Whole Numbers by 1 Digit:** Cards 118, 124   **Multiply Whole Numbers by 2 Digits:** Card 143   **Divide Whole Numbers by 1 Digit:** Card 167   **Divide Whole Numbers by 2 Digits:** Card 252

Strand: Algebra
Standard 4: Patterns, Relations, and Functions: Students shall recognize, describe, and develop patterns, relations, and functions.
Recognize, describe and develop patterns
A.4.4.1. Identify a number that is more or less than any *whole number* using multiples of 10, 100, and/or 1000.
Multiply Whole Numbers by 1 Digit: Cards 113, 114, 115, 116, 118, 119   **Multiply Whole Numbers by 2 Digits:** Cards 140, 141, 145

Strand: Algebra
Standard 4: Patterns, Relations, and Functions: Students shall recognize, describe, and develop patterns, relations, and functions.
Recognize, describe and develop patterns
A.4.4.2. Use repeating and growing numeric or geometric *patterns* to make predictions and solve problems.
Basic Facts: Add & Subtract: Cards 5, 6   **Multiply Whole Numbers by 1 Digit:** Cards 113, 114, 115, 116   **Multiply Whole Numbers by 2 Digits:** Cards 140, 141, 145   **Patterns & Numbers:** Cards 199, 200, 203, 204, 205, 206, 207

Strand: Algebra
Standard 4: Patterns, Relations, and Functions: Students shall recognize, describe, and develop patterns, relations, and functions.
Patterns, Relations and Patterns
A.4.4.3. Determine the relationship between sets of numbers by selecting the rule (2 step rule in words).
Basic Facts: Add & Subtract: Cards 5, 6, 12, 13   **Add Whole Numbers:** Card 31   **Subtract Whole Numbers:** Card 57   **Basic Facts: Multiply & Divide:** Cards 111, 112   **Multiply Whole Numbers by 1 Digit:** Card 117   **Multiply Whole Numbers by 2 Digits:** Cards 142, 145   **Divide Whole Numbers by 1 Digit:** Card 162   **Patterns & Numbers:** Cards 205, 206, 207   **Divide Whole Numbers by 2 Digits:** Card 256

Strand: Algebra
Standard 5: Algebraic Representations: Students shall represent and analyze mathematical situations and structures using algebraic symbols.
Expression, Equations and Inequalities
A.5.4.1. Select and/or write number sentences (equations) to find the unknown in problem-solving contexts involving two-*digit* by one-digit division using appropriate labels.
Basic Facts: Add & Subtract: Cards 7, 8, 11, 13   **Add Whole Numbers:** Card 41   **Subtract Whole Numbers:** Card 72   **Basic Facts: Multiply & Divide:** Card 110   **Multiply Whole Numbers by 1 Digit:** Card 122   **Divide Whole Numbers by 1 Digit:** Card 171   **Divide Whole Numbers by 2 Digits:** Card 258

Strand: Algebra
Standard 5: Algebraic Representations: Students shall represent and analyze mathematical situations and structures using algebraic symbols.
Expression, Equations and Inequalities
A.5.4.2. Express mathematical relationships using *equations* and *inequalities* (<, >, =, ≠).
Basic Facts: Add & Subtract: Cards 7, 8, 10, 11, 13 **Place Value: Whole Numbers:** Cards 20, 21, 22, 24 **Add Whole Numbers:** Card 41 **Subtract Whole Numbers:** Card 72 **Representing Numbers:** Cards 80, 82, 84 **Basic Facts: Multiply & Divide:** Card 110 **Multiply Whole Numbers by 1 Digit:** Card 122 **Divide Whole Numbers by 1 Digit:** Card 171 **Decimal Concepts:** Cards 210, 215, 216, 218 **Divide Whole Numbers by 2 Digits:** Card 258

Strand: Algebra
Standard 5: Algebraic Representations: Students shall represent and analyze mathematical situations and structures using algebraic symbols.
Expression, Equations and Inequalities
A.5.4.3. Use a variable to represent an unknown quantity in a number sentence involving *contextual situations* and find the value.
Basic Facts: Add & Subtract: Cards 10, 13 **Add Whole Numbers:** Card 41 **Subtract Whole Numbers:** Card 72 **Basic Facts: Multiply & Divide:** Cards 102, 103, 105 **Multiply Whole Numbers by 1 Digit:** Card 122 **Divide Whole Numbers by 1 Digit:** Card 171 **Divide Whole Numbers by 2 Digits:** Card 258

Strand: Algebra
Standard 6: Algebraic Models: Students shall develop and apply mathematical models to represent and understand quantitative relationships.
Algebraic Models and Relationships
A.6.4.1. Create a chart or table to organize given information and to understand relationships and to explain the results.
Basic Facts: Add & Subtract: Cards 12, 13   **Add Whole Numbers:** Card 31   **Subtract Whole Numbers:** Card 57   **Basic Facts: Multiply & Divide:** Cards 111, 112   **Multiply Whole Numbers by 1 Digit:** Card 117   **Multiply Whole Numbers by 2 Digits:** Card 142   **Divide Whole Numbers by 1 Digit:** Card 162   **Patterns & Numbers:** Cards 205, 206, 207   **Divide Whole Numbers by 2 Digits:** Card 256

Strand: Algebra
Standard 7: Analysis of Change: Students shall analyze change in various contexts.
Analyze Change
A7.4.1. Identify, describe and generalize relationships in which quantities change *proportionally*.
Basic Facts: Add & Subtract: Cards12, 13   **Basic Facts: Multiply & Divide:** Cards 111, 112   **Multiply Whole Numbers by 1 Digit:** Cards 113, 114, 115, 117   **Multiply Whole Numbers by 2 Digits:** Cards 140, 141, 142   **Divide Whole Numbers by 1 Digit:** Card 162   **Patterns & Numbers:** Cards 205, 206, 207   **Divide Whole Numbers by 2 Digits:** Card 256

Strand: Geometry
Standard 8: Geometric Properties: Students shall analyze characteristics and properties of 2 and 3 dimensional geometric shapes and develop mathematical arguments about geometric relationships.
Characteristics and Properties-Three Dimensional
G.8.4.1. Identify, describe and classify 3-D solids by properties including the number of *vertices, edges,* and shapes of *faces* using models.
Geometric Basics: Cards 156, 157, 158, 159, 160

Strand: Geometry
Standard 8: Geometric Properties: Students shall analyze characteristics and properties of 2 and 3 dimensional geometric shapes and develop mathematical arguments about geometric relationships.
Characteristics and Properties-Two Dimensional
G.8.4.2. Identify regular and *irregular polygons* including octagon.
Geometric Figures: Cards 135, 136, 137, 138, 139   **Geometric Basics:** Cards 151, 152, 153, 155

Strand: Geometry
Standard 8: Geometric Properties: Students shall analyze characteristics and properties of 2 and 3 dimensional geometric shapes and develop mathematical arguments about geometric relationships.
Characteristics and Properties-One Dimensional
G.8.4.3. Identify, draw and describe a *line, line segment,* a *ray,* an angle, *intersecting, perpendicular,* and *parallel lines.*
Geometric Figures: Cards 130, 131, 132, 133, 134

Strand: Geometry
Standard 8: Geometric Properties: Students shall analyze characteristics and properties of 2 and 3 dimensional geometric shapes and develop mathematical arguments about geometric relationships.
Geometric Relationships
G.8.4.4. Identify and describe *intersecting, perpendicular* and *parallel lines* in problem solving context.
Geometric Figures: Cards 131, 134

Strand: Geometry
Standard 8: Geometric Properties: Students shall analyze characteristics and properties of 2 and 3 dimensional geometric shapes and develop mathematical arguments about geometric relationships.
Geometric Relationships
G.8.4.5. Classify angles relative to 90º as more than, less than or equal to.
Geometric Figures: Cards 132, 133, 134

Strand: Geometry
Standard 9: Transformation of Shapes: Students shall apply transformations and the use of symmetry to analyze mathematical situations.
Symmetry and Transformations
G.9.4.1. Determine the result of a *transformation* of a two-dimensional figure as a slide (translation), flip (reflection) or turn (rotation) and justify the answer.
Spatial Sense & Transformations: Cards 271, 275, 276, 277, 278, 279, 280

Strand: Geometry
Standard 1:0: Coordinate Geometry: Students shall specify locations and describe spatial relationships using coordinate geometry and other representational systems.
Coordinate Geometry
G.10.4.1. Locate and identify points on a coordinate grid and name the ordered pair (quadrant one only) using common language and geometric vocabulary (horizontal and vertical).
Data & Graphs: Cards 184, 185

Strand: Geometry
Standard 1:1: Visualization and Geometric Models: Students shall use visualization, spatial reasoning, and geometric modeling.
Visualizations and Models
G.11.4.1. Construct a three-dimensional model composed of cubes when given an illustration.
This concept is not covered at this level.

Strand: Geometry
Standard 1:1: Visualization and Geometric Models: Students shall use visualization, spatial reasoning, and geometric modeling.
Visualizations and Models
G.11.4.2. Create new figures by combining or subdividing models of existing figures in multiple ways and record results in a table.
Geometric Basics: Cards 152, 153, 155, 159, 160

Strand: Measurement
Standard 12: Physical Attributes: Students shall use attributes of measurement to describe and compare mathematical and real-world objects.
Time: Clock
M.12.4.1. Recognize that 60 seconds equals 1 minute.
This concept is not covered at this level.

Strand: Measurement
Standard 12: Physical Attributes: Students shall use attributes of measurement to describe and compare mathematical and real-world objects.
Temperature
M.12.4.2. Distinguish the temperature in contextual problems using the Fahrenheit scale on a thermometer.
Weight, Capacity, & Temperature: Cards 230, 231

Strand: Measurement
Standard 12: Physical Attributes: Students shall use attributes of measurement to describe and compare mathematical and real-world objects.
Tools and Attributes
M.12.4.3. Use the relationship among units of measurement.
Time & Money: Cards 50, 51, 52, 53, 54 **Linear Measurement:** Cards 86, 87, 89, 90, 92, 93, 96, 97 **Weight, Capacity, & Temperature:** Cards 220, 222, 224, 225, 226, 227, 228, 229, 231

Strand: Measurement
Standard 12: Physical Attributes: Students shall use attributes of measurement to describe and compare mathematical and real-world objects.
Tools and Attributes
M.12.4.4. Create and complete a conversion table to show relationships between units of measurement in the same system.
Linear Measurement: Cards 86, 87, 89, 90, 91, 92, 93, 96, 97 **Weight, Capacity, & Temperature:** Cards 220, 222, 224, 225, 226, 227, 228, 229, 231

Strand: Measurement
Standard 13: Systems of Measurement: Students shall identify and use units, systems and processes of measurement.
Calendar
M.13.4.1. Use a calendar to determine *elapsed time* from month to month.
This concept is not covered at this level.

Strand: Measurement
Standard 13: Systems of Measurement: Students shall identify and use units, systems and processes of measurement.
Clock
M.13.4.2. Solve problems involving conversions between minutes and hours.
Time & Money: Cards 51, 52, 53, 54

Strand: Measurement
Standard 13: Systems of Measurement: Students shall identify and use units, systems and processes of measurement.
Clock
M.13.4.3. Restate the time in multiple ways given an analog clock to the nearest 1-minute.
Time & Money: Cards 50, 51, 52, 53, 54

Strand: Measurement
Standard 13: Systems of Measurement: Students shall identify and use units, systems and processes of measurement.
Elapsed Time
M.13.4.4. Determine *elapsed time* in *contextual situations* to five-minute intervals with beginning time unknown.
Time & Money: Cards 51, 52, 53, 54

Strand: Measurement
Standard 13: Systems of Measurement: Students shall identify and use units, systems and processes of measurement.
Money
M.13.4.5. Apply money concepts in *contextual situations:* • **Determine the better buy.** • **Determine change back with the least amount of currency.** • **Compare money.**
Time & Money: Cards 44, 45, 46, 47, 48, 49 **Add & Subtract Decimals:** Cards 292, 294, 298, 300

Strand: Measurement
Standard 13: Systems of Measurement: Students shall identify and use units, systems and processes of measurement.
Temperature
M.13.4.6. Read temperatures on Fahrenheit and Celsius scales.
Weight, Capacity, & Temperature: Cards 230, 231

Strand: Measurement
Standard 13: Systems of Measurement: Students shall identify and use units, systems and processes of measurement.
Applications
M.13.4.7. Use appropriate customary and metric measurement tools for length, capacity, and mass.
Linear Measurement: Cards 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97 **Weight, Capacity, & Temperature:** Cards 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 231

Strand: Measurement
Standard 13: Systems of Measurement: Students shall identify and use units, systems and processes of measurement.
Applications
M.13.4.8. *Estimate* **and measure length, capacity/volume and mass using appropriate customary and metric units.**
Linear Measurement: Cards 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97 **Weight, Capacity, & Temperature:** Cards 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 231

Strand: Measurement
Standard 13: Systems of Measurement: Students shall identify and use units, systems and processes of measurement.
Perimeter
M.13.4.9. Use *strategies* **for finding the** *perimeter* **of a rectangle.**
Perimeter & Area: Cards 186, 187, 188, 189

Strand: Measurement
Standard 13: Systems of Measurement: Students shall identify and use units, systems and processes of measurement.
Area
M.13.4.10. Use *strategies* **for finding the a***rea* **of a rectangle.**
Perimeter & Area: Cards 190, 191, 192, 193, 194, 195

Strand: Measurement
Standard 13: Systems of Measurement: Students shall identify and use units, systems and processes of measurement.
Applications
M.13.4.11. Use *strategies* **to find the** *volume* **(cubic units) of rectangular prisms and cubes.**
This concept is not covered at this level.

Strand: Data Analysis and Probability
Standard 14: Data Representation: Students shall formulate questions that can be addresses with data and collect, organize and display relevant data to answer them.
Collect, Organize, and Display Data
DAP.14.4.1. Create a data collection plan after being given a topic and collect, organize, display, describe and interpret simple data using *frequency tables* **or** *line plots,* **pictographs, and bar graphs.**
Data & Graphs: Cards 177, 178, 179, 180, 181, 182, 185

Strand: Data Analysis and Probability
Standard 15: Data Analysis: Students shall select and use appropriate statistical methods to analyze data.
Data Analysis
DAP.15.4.1. Represent and interpret *data* **using pictographs, bar graphs and line graphs in which symbols or intervals are greater than one.**
Data & Graphs: Cards 177, 178, 179, 180, 181, 182, 185

Strand: Data Analysis and Probability
Standard 15: Data Analysis: Students shall select and use appropriate statistical methods to analyze data.
Data Analysis
DAP.15.4.2. Match a set of *data* **with a graphical representation of the data.**
Data & Graphs: Cards 177, 178, 179, 180, 181, 182, 185

Strand: Data Analysis and Probability
Standard 16: Inferences and Predictions: Students shall develop and evaluate inferences and predictions that are based on data.
Inferences and Predictions
DAP.16.4.1. Make predictions for a given set of *data*.
Data & Graphs: Cards 177, 178, 179, 180, 181, 182, 185

Strand: Data Analysis and Probability
Standard 17: Probability: Students shall understand and apply basic concepts of probability.
Probability
DAP.17.4.1. Use fractions to predict *probability* of an event.
Probability: Cards 284, 285, 286, 288

Strand: Data Analysis and Probability
Standard 17: Probability: Students shall understand and apply basic concepts of probability.
Probability
DAP.17.4.2. Conduct simple *probability* experiments, record the data and draw conclusions about the likelihood of possible *outcomes* (roll number cubes, pull tiles from a bag, spin a spinner, or determine the fairness of the game).
Probability: Cards 284, 285, 286, 287, 288

Strand: Data Analysis and Probability
Standard 17: Probability: Students shall understand and apply basic concepts of probability.
Probability
DAP.17.4.3. Find all possible combinations of 2 or 3 sets of objects.
Probability: Cards 281, 282, 283

SRA Mathematics Laboratory 2b
correlation to
Arkansas Mathematics Curriculum Framework
Grade 5

Strand: Number and Operations
Standard 1: Number Sense: Students shall understand numbers, ways of representing numbers, relationships among numbers and number systems.
Rational Numbers
NO.1.5.1. Use *models* and visual representations to develop the concepts of the following: **Fractions:**   • **Parts of unit wholes**   • **Parts of a collection**   • **Locations on a number *line***   • **Locations on ruler (*benchmark fractions*)**   • **Divisions of whole numbers.**   **Ratios:**   • **Part-to-part (2 boys to 3 girls)**   • **Part-to-whole (2 boys to 5 people).**   **Percents:**   • **Part-to-100.**
Linear Measurement: Cards 51, 52, 53, 54, 55   **Fraction Concepts:** Cards 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128   **Coordinate Graphs:** Cards 229, 230, 231   **Decimal Concepts:** Cards 262, 263, 264, 266   **Percent Concepts:** Cards 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300

Strand: Number and Operations
Standard 1: Number Sense: Students shall understand numbers, ways of representing numbers, relationships among numbers and number systems.
Rational Numbers
NO.1.5.2. Develop understanding of decimal *place value* using *models*.
Decimal Concepts: Cards 218, 219, 221, 222, 223, 224, 225, 226, 227, 228, 231

Strand: Number and Operations
Standard 1: Number Sense: Students shall understand numbers, ways of representing numbers, relationships among numbers and number systems.
Rational Numbers
NO.1.5.3. Identify decimal and *percent equivalents* for *benchmark fractions*.
Decimal Concepts: Cards 220, 229, 230, 231   **Percent Concepts:** Cards 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300

Strand: Number and Operations
Standard 1: Number Sense: Students shall understand numbers, ways of representing numbers, relationships among numbers and number systems.
Rational Numbers
NO.1.5.4. Round and compare decimals to a given *place value* (*whole number*, tenths, hundredths).
Decimal Concepts: Cards 224, 225, 226, 227, 228, 231

Strand: Number and Operations
Standard 1: Number Sense: Students shall understand numbers, ways of representing numbers, relationships among numbers and number systems.
Rational Numbers
NO.1.5.5. Use *models of benchmark fractions* and their equivalents forms:
• **To analyze the size of fractions**
• **To determine that simplification does not change the value of the fraction**
• **To convert between *mixed numbers* and *improper fractions*.**
Fraction Concepts: Cards 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128   **Add Fractions:** Cards 139, 140, 144, 147, 148, 149, 150   **Subtract Fractions:** Cards 166, 167, 168, 169, 170, 171, 172

Strand: Number and Operations
Standard 1: Number Sense: Students shall understand numbers, ways of representing numbers, relationships among numbers and number systems.
Rational Numbers
NO.1.5.6. Use models to differentiate between *perfect squares* up to 100 and other numbers.
Representing Numbers: Cards 41, 42, 44

Strand: Numbers and Operations
Standard 2: Properties of Number Operations: Students shall understand meanings of operations and how they relate to one another.
Number Theory
NO.2.5.1. Use *divisibility rules* to determine if a number is a *factor* of another number (2, 3, 5, 10).
Patterns & Numbers: Cards 105, 106, 110, 111, 112, 113

Strand: Numbers and Operations
Standard 2: Properties of Number Operations: Students shall understand meanings of operations and how they relate to one another.
Number Theory
NO.2.5.2. Identify *commutative* and *associative* properties.
Basic Facts: Cards 2, 6, 8, 14

Strand: Numbers and Operations
Standard 2: Properties of Number Operations: Students shall understand meanings of operations and how they relate to one another.
Number Theory
NO.2.5.3. Identify the *distributive property* by using physical models to solve computation and real world problems.
Basic Facts: Cards 9, 12, 14

Strand: Numbers and Operations
Standard 2: Properties of Number Operations: Students shall understand meanings of operations and how they relate to one another.
Number Theory
NO.2.5.4. Apply rules (conventions) for *order of operations* to whole numbers where the left to right computations are modified only by the use of parentheses.
Representing Numbers: Cards 48, 49

Strand: Numbers and Operations
Standard 2: Properties of Number Operations: Students shall understand meanings of operations and how they relate to one another.
Understand Operations
NO.2.5.5. Model addition, subtraction, and multiplication of fractions with like and unlike denominators and decimals.
Add Fractions: Cards 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150   **Subtract Fractions:** Cards 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176   **Multiply & Divide Fractions:** Cards 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200   **Add & Subtract Decimals:** Cards 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254   **Multiply & Divide Decimals:** Cards 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278

Strand: Numbers and Operations
Standard 3: Numerical Operations and Estimation: Students shall compute fluently and make reasonable estimates.
Computational Fluency
NO.3.5.1. Develop and use a variety of *algorithms* with *computational fluency* to perform *whole number* operations using addition and subtraction (up to 5-digit numbers), multiplication (up to 3-digit x 2-digit), division (up to 2-digit divisor) interpreting remainders, including real world problems.
Add & Subtract Whole Numbers: Cards 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38   **Multiply Whole Numbers:** Cards 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76   **Divide Whole Numbers:** Cards 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104

Strand: Numbers and Operations
Standard 3: Numerical Operations and Estimation: Students shall compute fluently and make reasonable estimates.
Computational Fluency
NO.3.5.2. Develop and use *algorithms*:   • **To add and subtract numbers containing decimals (up to thousandths place)**   • **To multiply decimals (hundredths x tenths)**   • **To divide decimals by *whole numbers* divisors**   • **To add and subtract fractions with like denominators.**
Add Fractions: Cards 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150   **Subtract Fractions:** Cards 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176   **Multiply & Divide Fractions:** Cards 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200   **Add & Subtract Decimals:** Cards 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254   **Multiply & Divide Decimals:** Cards 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278

Strand: Numbers and Operations
Standard 3: Numerical Operations and Estimation: Students shall compute fluently and make reasonable estimates.
Computational Fluency
NO.3.5.3. Solve, with and without appropriate *technology*, two-step problems using a variety of methods and tools (i.e., objects, mental computation, paper and pencil).
Add & Subtract Whole Numbers: Cards 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38 **Linear Measurement:** Cards 58, 59, 60 **Multiply Whole Numbers:** Cards 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76 **Divide Whole Numbers:** Cards 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104 **Fraction Concepts:** Cards 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128 **Add Fractions:** Cards 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150 **Data & Graphs:** Cards 151, 152, 153, 154 **Subtract Fractions:** Cards 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176 **Weight, Capacity, Temperature & Time:** Card 186 **Multiply & Divide Fractions:** Cards 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200 **Add & Subtract Decimals:** Cards 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254 **Multiply & Divide Decimals:** Cards 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278 **Percent Concepts:** Cards 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300

Strand: Numbers and Operations
Standard 3: Numerical Operations and Estimation: Students shall compute fluently and make reasonable estimates.
Estimation
NO.3.5.4. Develop and use *strategies* to *estimate* the results of *whole number* computations and to judge the reasonableness of such results.
Add & Subtract Whole Numbers: Cards 25, 31 **Representing Numbers:** Cards 39, 40, 44 **Multiply Whole Numbers:** Cards 62, 66, 69, 76 **Divide Whole Numbers:** Cards 89, 95

Strand: Numbers and Operations
Standard 3: Numerical Operations and Estimation: Students shall compute fluently and make reasonable estimates.
Application of Computation
NO.3.5.5. Use *factors* of numbers: • **To introduce exponents**   • **To find common *factors* of two numbers**   • **To simplify fractions to the lowest terms.**
Representing Numbers: Cards 41, 42, 43, 44   **Patterns & Numbers:** Cards 105, 106, 107, 108, 111, 112, 113   **Fraction Concepts:** Cards 121, 122, 123, 124   **Add Fractions:** Cards 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150   **Subtract Fractions:** Cards 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176   **Multiply & Divide Fractions:** Cards 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200

Strand: Algebra
Standard 4: Patterns, Relations, and Functions: Students shall recognize, describe, and develop patterns, relations, and functions.
Patterns, Relations and Functions
A.4.5.1. Solve problems by finding the next term or missing term in a pattern or *function* table using real world situations.
Patterns & Numbers: Cards 114, 115, 116, 117

Strand: Algebra
Standard 4: Patterns, Relations, and Functions: Students shall recognize, describe, and develop patterns, relations, and functions.
Patterns, Relations and Functions
A.4.5.2. Interpret and write a rule for a one-operation *function* table.
Basic Facts: Cards 13, 14   **Add & Subtract Whole Numbers:** Cards 33, 38   **Patterns & Numbers:** Cards 114, 115, 116, 117

Strand: Algebra
Standard 5: Algebraic Representations: Students shall represent and analyze mathematical situations and structures using algebraic symbols.
Expression, Equations and Inequalities
A.5.5.1. Model and solve simple *equations* by informal methods using manipulatives and appropriate *technology*.
Basic Facts: Cards 2, 6, 8, 9, 14   **Add & Subtract Whole Numbers:** Cards 37, 38   **Multiply Whole Numbers:** Cards 65, 66   **Divide Whole Numbers:** Cards 97, 104   **Patterns & Numbers:** Cards 114, 115, 116, 117

Strand: Algebra
Standard 5: Algebraic Representations: Students shall represent and analyze mathematical situations and structures using algebraic symbols.
Expression, Equations and Inequalities
A.5.5.2. Write *expressions* containing one *variable* (a letter representing an unknown quantity) using rules for addition and subtraction.
Basic Facts: Cards 2, 5, 6, 8, 9, 12, 14 **Add & Subtract Whole Numbers:** Cards 37, 38 **Multiply Whole Numbers:** Cards 65, 66 **Divide Whole Numbers:** Cards 97, 108

Strand: Algebra
Standard 5: Algebraic Representations: Students shall represent and analyze mathematical situations and structures using algebraic symbols.
Expression, Equations and Inequalities
A.5.5.3. Select, write and evaluate *algebraic expressions* with one *variable* by substitution.
Basic Facts: Cards 2, 5, 6, 8, 9, 12, 14 **Add & Subtract Whole Numbers:** Cards 37, 38 **Multiply Whole Numbers:** Cards 65, 66 **Divide Whole Numbers:** Cards 97, 104 **Patterns & Numbers:** Cards 114, 115, 116, 117

Strand: Algebra
Standard 6: Algebraic Models: Students shall develop and apply mathematical models to represent and understand quantitative relationships.
Algebraic Models and Relationships
A.6.5.1. Draw conclusions and make predictions, with and without appropriate *technology*, from models, tables and *line graphs*.
Add & Subtract Whole Numbers: Cards 33, 38 **Patterns & Numbers:** Cards 114, 115, 116, 117 **Data & Graphs:** Cards 155, 156, 157, 158, 159, 160, 161 **Probability:** Cards 280, 281, 282, 283, 284, 285, 286, 287, 288, 289

Strand: Algebra
Standard 7: Analysis of Change: Students shall analyze change in various contexts.
Analyze Change
A7.5.1. Model and describe quantities that change using real world situations.
This concept is not covered at this level.

Strand: Geometry
Standard 8: Geometric Properties: Students shall analyze characteristics and properties of 2 and 3 dimensional geometric shapes and develop mathematical arguments about geometric relationships.
Characteristics of Geometric Shapes
G.8.5.1. Identify and model regular and *irregular polygons* including decagon.
Geometric Basics: Cards 83, 84, 87 **Geometric Figures:** Cards 130, 131, 132, 133 **Spatial Sense & Transformations:** Cards 235, 236, 237

Strand: Geometry
Standard 8: Geometric Properties: Students shall analyze characteristics and properties of 2 and 3 dimensional geometric shapes and develop mathematical arguments about geometric relationships.
Characteristics of Geometric Shapes
G.8.5.2. Identify and draw *congruent, adjacent, obtuse, acute, right* and *straight* angles (label parts of an angle: *vertex, rays, interior* and *exterior*).
Geometric Basics: Cards 79, 80, 81, 82 **Geometric Figures:** Cards 129, 130, 131, 132, 133

Strand: Geometry
Standard 8: Geometric Properties: Students shall analyze characteristics and properties of 2 and 3 dimensional geometric shapes and develop mathematical arguments about geometric relationships.
Characteristics of Geometric Shapes
G.8.5.3. Model and identify *circle, radius, diameter, center, circumference* and chord.
Geometric Basics: Cards 86, 87 **Perimeter, Area & Volume:** Cards 203, 210

Strand: Geometry
Standard 8: Geometric Properties: Students shall analyze characteristics and properties of 2 and 3 dimensional geometric shapes and develop mathematical arguments about geometric relationships.
Characteristics of Geometric Shapes
G.8.5.4. Model and identify the properties of *congruent* figures.
Geometric Figures: Cards 135, 136, 137, 138 **Spatial Sense & Transformations:** Card 235

Strand: Geometry
Standard 9: Transformation of Shapes: Students shall apply transformations and the use of symmetry to analyze mathematical situations.
Symmetry and Transformations
G.9.5.1. Predict and describe the results of *translation* (slide), *reflection* (flip), *rotation* (turn), showing that the transformed shape remains unchanged.
Spatial Sense & Transformations: Cards 233, 234, 235, 237

Strand: Geometry
Standard 10: Coordinate Geometry: Students shall specify locations and describe spatial relationships using coordinate geometry and other representational systems.
Coordinate Geometry
G.10.5.1. Use geometric vocabulary (horizontal/x-axis, vertical/y-axis, *ordered pairs*) to describe the location and plot points in *Quadrant I*.
Coordinate Graphs: Cards 255, 256, 257, 258, 259, 260, 261, 265, 266

Strand: Geometry
Standard 11: Visualization and Geometric Models: Students shall use visualization, spatial reasoning, and geometric modeling.
Spatial Visualizations and Models
G.11.5.1. Using grid paper, draw and identify two-dimensional patterns (*nets*) for *cubes*.
Spatial Sense & Transformations: Cards 240, 242

Strand: Measurement
Standard 12: Physical Attributes: Students shall use attributes and tools to describe and compare mathematical and real-world objects.
Attributes and Tools
M.12.5.1. Identify and select appropriate units and tools to measure.
Linear Measurement: Cards 50, 51, 54, 55 **Geometric Basics:** Cards 81, 82 **Weight, Capacity, Temperature & Time:** Cards 177, 178, 181, 182, 186, 187, 188 **Perimeter, Area & Volume:** Cards 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217

Strand: Measurement
Standard 12: Physical Attributes: Students shall use attributes and tools to describe and compare mathematical and real-world objects.
Attributes and Tools
M.12.5.2. Make conversions within the customary measurement system in real world problems.
Linear Measurement: Cards 53, 55, 57, 59, 60 **Weight, Capacity, Temperature & Time:** Cards 179, 182, 183, 185, 188

Strand: Measurement
Standard 12: Physical Attributes: Students shall use attributes and tools to describe and compare mathematical and real-world objects.
Attributes and Tools
M.12.5.3. Establish through experiences benchmarks prefixes of milli-, centi-, and kilo-.
Linear Measurement: Cards 52, 55, 56, 58, 60 **Weight, Capacity, Temperature & Time:** Cards 178, 180, 181, 182, 184, 188

Strand: Measurement
Standard 12: Physical Attributes: Students shall use attributes and tools to describe and compare mathematical and real-world objects.
Attributes and Tools
M.12.5.4. Understand when to use *linear* **units to describe** *perimeter, square* **units to describe** *area* **or** *surface area,* **and cubic units to describe** *volume,* **in real world situations.**
Perimeter, Area & Volume: Cards 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217 **Spatial Sense & Transformations:** Cards 239, 242

Strand: Measurement
Standard 12: Physical Attributes: Students shall use attributes and tools to describe and compare mathematical and real-world objects.
Attributes and Tools
M.12.5.5. Model the differences between covering the faces (*surface area/nets***) and finding the** *interior* **(***volume* **of** *cubes***).**
Perimeter, Area & Volume: Cards 212, 213, 214, 215, 216, 217

Strand: Measurement
Standard 13: Systems of Measurement: Students shall identify and use units, systems and processes of measurement.
Attributes and Tools
M.13.5.1. Solve real world problems involving one *elapsed time,* **counting forward (calendar and clock).**
Weight, Capacity, Temperature & Time: Cards 186, 187, 188

Strand: Measurement
Standard 13: Systems of Measurement: Students shall identify and use units, systems and processes of measurement.
Attributes and Tools
M.13.5.2. Determine which unit of measure or measurement tool matches the context for a problem situation.
Linear Measurement: Cards 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60 **Geometric Basics:** Cards 81, 82 **Weight, Capacity, Temperature & Time:** Cards 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188 **Perimeter, Area & Volume:** Cards 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217

Strand: Measurement
Standard 13: Systems of Measurement: Students shall identify and use units, systems and processes of measurement.
Attributes and Tools
M.13.5.3. Draw and measure distance to the nearest cm and ¼ inch accurately.
Linear Measurement: Cards 50, 51, 54, 55

Strand: Measurement
Standard 13: Systems of Measurement: Students shall identify and use units, systems and processes of measurement.
Attributes and Tools
M.13.5.4. Develop and use *strategies* **to solve real world problems involving** *perimeter* **and** *area* **of rectangles.**
Perimeter, Area & Volume: Cards 201, 202, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 216, 217 **Spatial Sense & Transformations:** Cards 239, 242

Strand: Measurement
Standard 13: Systems of Measurement: Students shall identify and use units, systems and processes of measurement.
Attributes and Tools
M.13.5.5. Count the distance between two points on a horizontal or vertical *line* and compare the lengths of the paths on a grid.
Linear Measurement: Cards 51, 54, 55 **Coordinate Graphs:** Cards 260, 261, 262, 263, 264, 266

Strand: Measurement
Standard 13: Systems of Measurement: Students shall identify and use units, systems and processes of measurement.
Attributes and Tools
M.13.5.6. Use benchmark angles (e.g., 45 degrees, 90 degrees, 120 degrees, 180 degrees) to estimate the measure of angles.
Geometric Basics: Cards 79, 80, 81, 82 **Geometric Figures:** Card 132

Strand: Data Analysis and Probability
Standard 14: Data Representation: Students shall formulate questions that can be addresses with data and collect, organize and display relevant data to answer them.
Collect, Organize, and Display Data
DAP.14.5.1. Develop appropriate questions for surveys.
Data & Graphs: Cards 155, 156, 157, 158, 159, 160, 161, 162, 163, 164

Strand: Data Analysis and Probability
Standard 14: Data Representation: Students shall formulate questions that can be addresses with data and collect, organize and display relevant data to answer them.
Collect, Organize, and Display Data
DAP.14.5.2. Collect numerical and categorical data using surveys, observations and experiments that would result in *bar graphs, line graphs, line plots* and *stem-and-leaf plots.*
Data & Graphs: Cards 155, 156, 157, 158, 159, 160, 161, 162, 163, 164

Strand: Data Analysis and Probability
Standard 14: Data Representation: Students shall formulate questions that can be addresses with data and collect, organize and display relevant data to answer them.
Collect, Organize, and Display Data
DAP.14.5.3. Construct and interpret *frequency tables,* charts, *line plots, stem-and-leaf plots* and *bar graphs.*
Data & Graphs: Cards 155, 156, 157, 158, 159, 160, 161, 162, 163, 164

Strand: Data Analysis and Probability
Standard 15: Data Analysis: Students shall select and use appropriate statistical methods to analyze data.
Data Analysis
DAP.15.5.1. Interpret *graphs* such as *line graphs, double bar graphs,* and *circle graphs.*
Data & Graphs: Cards 157, 158, 159, 160, 161, 164

Strand: Data Analysis and Probability
Standard 15: Data Analysis: Students shall select and use appropriate statistical methods to analyze data.
Data Analysis
DAP.15.5.2. Determine, with and without appropriate *technology*, the *range, mean, median* and *mode* (*whole number data sets*) and explain what each indicates about the set of data.
Data & Graphs: Cards 151, 152, 153, 154, 155, 156

Strand: Data Analysis and Probability
Standard 16: Inferences and Predictions: Students shall develop and evaluate inferences and predictions that are based on data.
Data Analysis
DAP.16.5.1. Make predictions and justify conclusions based on data.
Data & Graphs: Cards 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164

Strand: Data Analysis and Probability
Standard 17: Probability: Students shall understand and apply basic concepts of probability.
Data Analysis
DAP.17.5.1. Identify and predict the *probability* of events within a simple experiment.
Probability: Cards 284, 285, 286, 287, 288, 289

Strand: Data Analysis and Probability
Standard 17: Probability: Students shall understand and apply basic concepts of probability.
Data Analysis
DAP.17.5.2. List and explain all possible *outcomes* in a given situation.
Probability: Cards 279, 280, 281, 282, 283

SRA Mathematics Laboratory 2c
correlation to
Arkansas Mathematics Curriculum Framework
Grade 6

Strand: Number and Operations
Standard 1: Number Sense: Students shall understand numbers, ways of representing numbers, relationships among numbers and number systems.
Rational Numbers
NO.1.6.1. Demonstrate conceptual understanding to find a specific *percent* of a number, using models, real-life examples, or explanations.
Using Decimals & Percents: Cards 254, 255, 256, 257, 258, 259, 260, 261, 262

Strand: Number and Operations
Standard 1: Number Sense: Students shall understand numbers, ways of representing numbers, relationships among numbers and number systems.
Rational Numbers
NO.1.6.2. Find decimal and *percent equivalents* for proper fractions and explain why they represent the same value.
Fraction & Decimal Concepts: Cards 103, 104, 105, 106, 107, 108 Divide Decimals: Cards 239, 240 Using Decimals & Percents: Cards 253, 254, 255, 256, 257, 258, 259, 250, 260, 261, 262

Strand: Number and Operations
Standard 1: Number Sense: Students shall understand numbers, ways of representing numbers, relationships among numbers and number systems.
Rational Numbers
NO.1.6.3. Round and compare decimals to a given *place value* including thousandths.
Place Value: Cards 37, 38, 39, 40, 41 Add & Subtract Decimals: Cards 177, 181, 182, 187 Multiply Decimals: Card 212 Divide Decimals: Cards 228, 238

Strand: Number and Operations
Standard 1: Number Sense: Students shall understand numbers, ways of representing numbers, relationships among numbers and number systems.
Rational Numbers
NO.1.6.4. Convert, compare and order fractions (mixed numbers and improper fractions), decimals and *percents* and find their approximate locations on a number line.
Place Value: Cards 39, 40, 41 Fraction & Decimal Concepts: Cards 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108 Add & Subtract Fractions: Card 122 Using Decimals & Percents: Cards 253, 254, 255, 256, 257, 258, 259, 260, 261, 262

Strand: Number and Operations
Standard 1: Number Sense: Students shall understand numbers, ways of representing numbers, relationships among numbers and number systems.
Rational Numbers
NO.1.6.5. Recognize and identify *perfect squares* and their *square roots*.
Basic Facts: Cards 12, 13, 14

Strand: Numbers and Operations
Standard 2: Properties of Number Operations: Students shall understand meanings of operations and how they relate to one another.
Number Theory
NO.2.6.1. Use *divisibility rules* to determine if a number is a *factor* of another number (4, 6, 9).
Patterns & Numbers: Cards 90, 94

Strand: Numbers and Operations
Standard 2: Properties of Number Operations: Students shall understand meanings of operations and how they relate to one another.
Number Theory
NO.2.6.2. Apply the *distributive property* of multiplication over addition to simplify computations with *whole numbers*.
Basic Facts: Cards 10, 12, 14 **Algebra Concepts:** Cards 295, 296

Strand: Numbers and Operations
Standard 2: Properties of Number Operations: Students shall understand meanings of operations and how they relate to one another.
Number Theory
NO.2.6.3. Apply the addition, subtraction, multiplication and division properties of equality to one-step *equations* with *whole numbers*.
Basic Facts: Cards 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14 **Add & Subtract Whole Numbers:** Cards 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31 **Multiply & Divide Whole Numbers:** Cards 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59 **Algebra Concepts:** Cards 292, 293, 294, 295, 296, 297, 298, 299, 300

Strand: Numbers and Operations
Standard 2: Properties of Number Operations: Students shall understand meanings of operations and how they relate to one another.
Number Theory
NO.2.6.4. Apply rules (conventions) for *order of operations* with and without parentheses.
Basic Facts: Cards 10, 12, 13, 14 **Algebra Concepts:** Cards 294, 295, 296, 297, 300

Strand: Numbers and Operations
Standard 2: Properties of Number Operations: Students shall understand meanings of operations and how they relate to one another.
Understand Operations
NO.2.6.5. Model multiplication and division of fractions (including mixed numbers) and decimals using pictures and physical objects.
Multiply & Divide Fractions: Cards 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164   **Multiply Decimals:** Cards 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212   **Divide Decimals:** Cards 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240

Strand: Numbers and Operations
Standard 3: Numerical Operations and Estimation: Students shall compute fluently and make reasonable estimates.
Computational Fluency
NO.3.6.1. Apply, with and without appropriate *technology, algorithms* with *computational fluency* to perform *whole number* operations (+, -, x, /).
Basic Facts: Cards 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14   **Add & Subtract Whole Numbers:** Cards 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31   **Multiply & Divide Whole Numbers:** Cards 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59

Strand: Numbers and Operations
Standard 3: Numerical Operations and Estimation: Students shall compute fluently and make reasonable estimates.
Computational Fluency
NO.3.6.2. Develop and analyze *algorithms* for computing with fractions (including mixed numbers) and decimals, with and without *technology, computational fluency* in their use and justify the solution.
Add & Subtract Fractions: Cards 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137   **Multiply & Divide Fractions:** Cards 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164   **Add & Subtract Decimals:** Cards 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187   **Multiply Decimals:** Cards 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212   **Divide Decimals:** Cards 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240

Strand: Numbers and Operations
Standard 3: Numerical Operations and Estimation: Students shall compute fluently and make reasonable estimates.
Computational Fluency
NO.3.6.3. Solve, with and without appropriate *technology*, multi-step problems using a variety of methods and tools (i.e., objects, mental computation, paper and pencil).
Basic Facts: Cards 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14 **Add & Subtract Whole Numbers:** Cards 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28,2 9, 30, 31 **Multiply & Divide Whole Numbers:** Cards 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59 **Patterns & Numbers:** Cards 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94 **Add & Subtract Fractions:** Cards 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137 **Multiply & Divide Fractions:** Cards 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164 **Add & Subtract Decimals:** Cards 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187 **Multiply Decimals:** Cards 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212 **Divide Decimals:** Cards 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240 **Using Decimals & Percents:** Cards 253, 254, 255, 256, 257, 258, 259, 260, 261, 262 **Algebra Concepts:** Cards 292, 293, 294, 295, 296, 297, 298, 299, 300

Strand: Numbers and Operations
Standard 3: Numerical Operations and Estimation: Students shall compute fluently and make reasonable estimates.
Estimation
NO.3.6.4. *Estimate* reasonable solutions to problem situations involving fractions and decimals.
Add & Subtract Fractions: Cards 127, 129, 131, 137 **Add & Subtract Decimals:** Cards 177, 181, 182, 187 **Multiply Decimals:** Card 212 **Divide Decimals:** Cards 228, 231, 238

Strand: Numbers and Operations
Standard 3: Numerical Operations and Estimation: Students shall compute fluently and make reasonable estimates.
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)*.
Patterns & Numbers: Cards 84, 85, 86, 87, 88, 89, 90, 92, 93, 94

Strand: Numbers and Operations
Standard 3: Numerical Operations and Estimation: Students shall compute fluently and make reasonable estimates.
Application of Computation
NO.3.6.6. Use *proportional* reasoning and *ratios* to represent a problem situation and determine the reasonableness of solutions with and without appropriate *technology*.
Ratios & Proportions: Cards 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283

Strand: Numbers and Operations
Standard 3: Numerical Operations and Estimation: Students shall compute fluently and make reasonable estimates.
Application of Computation
NO.3.6.7. Determine the *percent* of a number and solve related problems in real world situations.
Using Decimals & Percents: Cards 254, 255, 256, 257, 258, 259, 260, 261, 262

Strand: Algebra
Standard 4: Patterns, Relations, and Functions: Students shall recognize, describe, and develop patterns, relations, and functions.
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.
Basic Facts: Cards 11, 14 **Patterns & Numbers:** Cards 86, 89, 91

Strand: Algebra
Standard 4: Patterns, Relations, and Functions: Students shall recognize, describe, and develop patterns, relations, and functions.
Patterns, Relations and Functions
A.4.6.2. Interpret and write an *algebraic* rule for a one-operation *function* table.
Basic Facts: Cards 11, 14 **Add & Subtract Whole Numbers:** Cards 26, 38 **Multiply & Divide Whole Numbers:** Cards 55, 59 **Patterns & Numbers:** Cards 91, 94

Strand: Algebra
Standard 5: Algebraic Representations: Students shall represent and analyze mathematical situations and structures using algebraic symbols.
Expression, Equations and Inequalities
A.5.6.1. Model, write and solve one-step *equations* by informal methods using manipulatives and appropriate *technology*.
Basic Facts: Cards 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14 **Add & Subtract Whole Numbers:** Cards 26, 31 **Multiply & Divide Whole Numbers:** Cards 55, 56, 59 **Patterns & Numbers:** Cards 91, 94 **Algebra Concepts:** Cards 292, 293, 294, 295, 296, 297, 298, 299, 300

Strand: Algebra
Standard 5: Algebraic Representations: Students shall represent and analyze mathematical situations and structures using algebraic symbols.
Expression, Equations and Inequalities
A.5.6.2. Write simple *expressions* using appropriate operations (+, -, x, /) with one *variable*.
Basic Facts: Cards 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14 **Algebra Concepts:** Cards 292, 293, 294, 295, 296, 297, 298, 299, 300

Strand: Algebra
Standard 5: Algebraic Representations: Students shall represent and analyze mathematical situations and structures using algebraic symbols.
Expression, Equations and Inequalities
A.5.6.3. Evaluate *algebraic expressions* **with one** *variable* **using appropriate properties and operations (=, -, x, /).**
Basic Facts: Cards 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14   **Add & Subtract Whole Numbers:** Cards 26, 31   **Multiply & Divide Whole Numbers:** Cards 55, 56, 59   **Algebra Concepts:** Cards 292, 293, 294, 295, 296, 297, 298, 299, 300

Strand: Algebra
Standard 6: Algebraic Models: Students shall develop and apply mathematical models to represent and understand quantitative relationships.
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 I.*
Add & Subtract Whole Numbers: Cards 26, 31   **Multiply & Divide Whole Numbers:** Cards 55, 59   **Patterns & Numbers:** Card 91   **Coordinate Graphs:** Cards 289, 290, 291   **Algebra Concepts:** Cards 292, 293, 294, 295, 296, 297, 298, 299, 300

Strand: Algebra
Standard 7: Analysis of Change: Students shall analyze change in various contexts.
Analyze Change
A7.6.1. Identify and compare situations with constant or varying *rates* **of change.**
Data & Graphs: Cards 144, 149   **Ratios & Proportions:** Cards 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283

Strand: Geometry
Standard 8: Geometric Properties: Students shall analyze characteristics and properties of 2 and 3 dimensional geometric shapes and develop mathematical arguments about geometric relationships.
Characteristics of Geometric Shapes
G.8.6.1. Identify *three-dimensional* **geometric figures using models (***rectangular prisms, cylinders, cones, pyramids* **and** *spheres***).**
Geometric Figures: Cards 174, 175   **Surface Area & Volume:** Cards 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252

Strand: Geometry
Standard 8: Geometric Properties: Students shall analyze characteristics and properties of 2 and 3 dimensional geometric shapes and develop mathematical arguments about geometric relationships.
Characteristics of Geometric Shapes
G.8.6.2. Investigate with manipulatives or grid paper what happens to the *perimeter* and *area* of a 2-dimensional shape when the dimensions are changed.
Perimeter & Area: Cards 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227

Strand: Geometry
Standard 8: Geometric Properties: Students shall analyze characteristics and properties of 2 and 3 dimensional geometric shapes and develop mathematical arguments about geometric relationships.
Characteristics of Geometric Shapes
G.8.6.3. Identify, describe, draw, and classify triangles as *equilateral, isosceles, scalene, right, acute, obtuse,* and *equiangular.*
Measurement: Cards 117, 118, 121   **Geometric Figures:** Card 164   **Perimeter & Area:** Cards 219, 220, 221

Strand: Geometry
Standard 8: Geometric Properties: Students shall analyze characteristics and properties of 2 and 3 dimensional geometric shapes and develop mathematical arguments about geometric relationships.
Characteristics of Geometric Shapes
G.8.6.4. Draw, label and determine relationships among the *radius, diameter, center,* and *circumference* (e.g., *radius* is half the diameter) of a circle.
Perimeter & Area: Cards 224, 225, 226, 227   **Surface Area & Volume:** Cards 244, 245, 249, 251, 252

Strand: Geometry
Standard 8: Geometric Properties: Students shall analyze characteristics and properties of 2 and 3 dimensional geometric shapes and develop mathematical arguments about geometric relationships.
Characteristics of Geometric Shapes
G.8.6.5. Identify *similar figures* and explore their properties.
Spatial Sense & Transformations: Cards 263, 264, 265, 266, 267

Strand: Geometry
Standard 9: Transformation of Shapes: Students shall apply transformations and the use of symmetry to analyze mathematical situations.
Symmetry and Transformations
G.9.6.1. Identify and describe *line* and *rotational* symmetry in two-dimensional shapes, patterns and designs.
Geometric Figures: Cards 172, 173, 175   **Spatial Sense & Transformations:** Cards 268, 269, 270, 271, 272

Strand: Geometry
Standard 9: Transformation of Shapes: Students shall apply transformations and the use of symmetry to analyze mathematical situations.
Symmetry and Transformations
G.9.6.2. Describe positions and orientations of shapes under *transformation (translation*, *reflection* and *rotation* recognizing the size and shape do not change.
Geometric Figures: Cards 173, 175 **Spatial Sense & Transformations:** Cards 268, 269, 270, 271, 272

Strand: Geometry
Standard 10: Coordinate Geometry: Students shall specify locations and describe spatial relationships using coordinate geometry and other representational systems.
Coordinate Geometry
G.10.6.1. Use *ordered pairs* to plot points in *Quadrant I.*
Data & Graphs: Card 152 **Coordinate Graphs:** Cards 284, 285, 286, 287, 288, 289, 290, 291

Strand: Geometry
Standard 10: Coordinate Geometry: Students shall specify locations and describe spatial relationships using coordinate geometry and other representational systems.
Coordinate Geometry
G.10.6.2. Plot points that form the *vertices* of a geometric figure and draw, identify and classify the figure.
Coordinate Graphs: Card 287

Strand: Geometry
Standard 11: Visualization and Geometric Models: Students shall use visualization, spatial reasoning, and geometric modeling.
Spatial Visualizations and Models
G.11.6.1. Identify two-dimensional patterns (*nets*) for three-dimensional solids, such as *prisms, cylinders* and *cubes.*
Surface Area & Volume: Cards 241, 242, 243, 244

Strand: Measurement
Standard 12: Physical Attributes: Students shall use attributes and tools to describe and compare mathematical and real-world objects.
Attributes and Tools
M.12.6.1. Identify and select appropriate units and tools from both systems to measure.
Weight, Capacity, & Time: Cards 74, 75, 76, 77, 78, 79, 80, 81, 82, 83 **Measurement:** Cards 109, 110, 111, 112, 113, 120, 121 **Perimeter & Area:** Cards 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227

Strand: Measurement
Standard 12: Physical Attributes: Students shall use attributes and tools to describe and compare mathematical and real-world objects.
Attributes and Tools
M.12.6.2. Make conversions within the same measurement system in real world problems.
Weight, Capacity, & Time: Cards 74, 75, 76, 77, 78, 79, 81, 82, 83

Strand: Measurement
Standard 12: Physical Attributes: Students shall use attributes and tools to describe and compare mathematical and real-world objects.
Attributes and Tools
M.12.6.3. Compare and contrast the differences among *linear* units, *square* units, and cubic units.
Measurement: Cards 109, 110, 111, 113 **Perimeter & Area:** Cards 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227 **Surface Area & Volume:** Cards 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252

Strand: Measurement
Standard 12: Physical Attributes: Students shall use attributes and tools to describe and compare mathematical and real-world objects.
Attributes and Tools
M.12.6.4. Determine which unit of measure or measurement tool matches the context for a problem situation.
Weight, Capacity, & Time: Cards 74, 75, 76, 77, 78, 79, 80, 81, 82, 83 **Measurement:** Cards 109, 110, 111, 112, 113, 120, 121 **Perimeter & Area:** Cards 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227

Strand: Measurement
Standard 13: Systems of Measurement: Students shall identify and use units, systems and processes of measurement.
Attributes and Tools
M.13.6.1. Solve real world problems involving one *elapsed time,* counting forward and backward (calendar and clock).
Weight, Capacity, & Time: Cards

Strand: Measurement
Standard 13: Systems of Measurement: Students shall identify and use units, systems and processes of measurement.
Attributes and Tools
M.13.6.2. Determine which unit of measure or measurement tool matches the context for a problem situation.
Weight, Capacity, & Time: Cards 74, 75, 76, 77, 78, 79, 80, 81, 82, 83 **Measurement:** Cards 109, 110, 111, 112, 113, 120, 121 **Perimeter & Area:** Cards 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227

Strand: Measurement
Standard 13: Systems of Measurement: Students shall identify and use units, systems and processes of measurement.
Attributes and Tools
M.13.6.3. Draw and measure distance to the nearest cm and 1/8 inch accurately.
Measurement: Cards 109, 110, 111, 113

Strand: Measurement
Standard 13: Systems of Measurement: Students shall identify and use units, systems and processes of measurement.
Attributes and Tools
M.13.6.4. Establish and apply formulas to find *area* and *perimeter* of triangles, rectangles and *parallelograms*.
Perimeter & Area: Cards 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227 **Surface Area & Volume:** Cards 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252

| **Strand: Measurement** |
| **Standard 13: Systems of Measurement: Students shall identify and use units, systems and processes of measurement.** |
| **Attributes and Tools** |
| **M.13.6.5. Find the distance between two points on a number *line*.** |
| **Measurement:** Cards 109, 110, 111, 113

Coordinate Graphs: Cards 288, 291 |

| **Strand: Measurement** |
| **Standard 13: Systems of Measurement: Students shall identify and use units, systems and processes of measurement.** |
| **Attributes and Tools** |
| **M.13.6.6. Use estimation to check the reasonableness of measurements obtained from the use of various instruments (including angle measures).** |
| This concept is not covered at this level. |

| **Strand: Data Analysis and Probability** |
| **Standard 14: Data Representation: Students shall formulate questions that can be addresses with data and collect, organize and display relevant data to answer them.** |
| **Collect, Organize, and Display Data** |
| **DAP.14.6.1. Formulate questions, design studies, and collect data about a characteristics shared by two *populations* or different characteristics within one *population*.** |
| **Data & Graphs:** Cards 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153 |

| **Strand: Data Analysis and Probability** |
| **Standard 14: Data Representation: Students shall formulate questions that can be addresses with data and collect, organize and display relevant data to answer them.** |
| **Collect, Organize, and Display Data** |
| **DAP.14.6.2. Collect data and select appropriate graphical representations to display the data including *Venn diagrams*.** |
| **Data & Graphs:** Cards 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153 |

| **Strand: Data Analysis and Probability** |
| **Standard 14: Data Representation: Students shall formulate questions that can be addresses with data and collect, organize and display relevant data to answer them.** |
| **Collect, Organize, and Display Data** |
| **DAP.14.6.3. Construct and interpret *graphs*, using correct scale, including *line graphs* and *double-bar graphs*.** |
| **Data & Graphs:** Cards 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153 |

| **Strand: Data Analysis and Probability** |
| **Standard 15: Data Analysis: Students shall select and use appropriate statistical methods to analyze data.** |
| **Data Analysis** |
| **DAP.15.6.1. Interpret *graphs* such as *double line graphs* and *circle graphs*.** |
| **Data & Graphs:** Cards 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153 |

| **Strand: Data Analysis and Probability** |
| **Standard 15: Data Analysis: Students shall select and use appropriate statistical methods to analyze data.** |
| **Data Analysis** |
| **DAP.15.6.2. Compare and interpret information provided by measures of *central tendencies* (*mean, median* and *mode*) and measures of *spread* (*range*).** |
| **Data & Graphs:** Cards 138, 139, 140, 141, 145 |

Strand: Data Analysis and Probability
Standard 16: Inferences and Predictions: Students shall develop and evaluate inferences and predictions that are based on data.
Data Analysis
DAP.16.6.1. Use observations about differences in data to make justifiable inferences.
Data & Graphs: Cards 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153

Strand: Data Analysis and Probability
Standard 17: Probability: Students shall understand and apply basic concepts of probability.
Data Analysis
DAP.17.6.1. Distinguish between *theoretical* and experimental *probability*.
Probability: Cards 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201