CPSD: Grade 4 Mathematics						
Module 1 Addition and subtraction	Module 2 Unit conversions	Module 3 Multi-digit multiplication and division	Module 4 Angle measure and plane figures	Module 5 Fraction equivalence, ordering, and operations	Module 6 Decimal fractions	Module 7 Exploring multiplication
Apx. 25 days 18 lessons	Apx. 7 days 5 lessons	Apx. 43 days 36 lessons	Apx. 15 days 11 lessons	Apx. 45 days Apx. 30 Lessons	Apx. 20 days 16 Lessons	Apx. 20 days 14 Lessons
4.OA.A.3 Multi-step word problems in all 4 operations 4.NBT.A.1 Powers of 10 4.NBT.A.2 Read, write, & compare numbers to millions place. 4.NBT.A.3 Round numbers to any place value 4.NBT.B.4 Addition & Subtraction Fluency	4.MD.A.1 Understand metric measurement conversions (km, m, cm; kg, g; mL, L) 4.MD.A.2 Word problems involving metric measurement	4.OA.A.1 Multiplicative comparison 4.OA.A.2 Multiplicative Comparison 4.OA.A.3 Multi-step word problems 4.OA.B.4 Factors and multiples 4.NBT.B.5 Whole number multiplication 4.NBT.B.6 Division with remainders 4.MD.A.3 Area & perimeter of	4.MD.C.5 Angles 4.MD.C.6 Measuring angles 4.MD.C.7 Additive angle measurement 4.G.A.1 Drawing lines, points, rays, and angles (right, acute, obtuse) 4.G.A.2 Classifying 2-D shapes 4.G.A.3 Symmetry	4.OA.C.5 Number & shape patterns 4.NF.A.1 Equivalent fractions 4.NF.A.2 Comparing fractions 4.NF.B.3 Composing & decomposing fractions 4.NF.B.4 Multiply fractions by a whole number 4.MD.A.2 Word problems involving measurement 4.MD.B.4 Fractional line plots	4.NF.C.5 Tenths/hundredths equivalency 4.NF.C.6 Decimal notation for fractions using denominators of 10 & 100. 4.NF.C.7 Comparing tenths and hundredths in decimals 4.MD.A.2 Word problems involving measurement	4.OA.A.1 Multiplicative comparison 4.OA.A.2 Multiplicative Comparison 4.OA.A.3 Multi-step word problems 4.NBT.B.5 Whole number multiplication 4.MD.A.1 standard & metric measurement conversions 4.MD.A.2 Word problems involving measurement

		rectangles				

- Power standards are highlighted.

Module 1

Module 2

Module 3

Module 4

Module 5

Module 6

Module 7

Module 1	Addition and Subtraction	**Grade Level**	4	**Dates**	Approximately 25 days

CPSD Power Standards and Learning Indicators

- 4.OA.A.3 Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.
    - I can solve multi-step word problems using the four operations.
    - I can make sense of remainders.
    - I can determine the reasonableness of answers.
- 4.NBT.A.1 Recognize that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right For example: Recognize that 700 ÷ 70 = 10 or 700 =10x70 by applying concepts of place value and division.
    - I can determine the value of a digit (and that a digit represents ten times what it would be in the place to its right).
    - I can use place value to multiply and divide.
- 4.NBT.A.2 Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using symbols (>, =, <) to record the results of comparisons.
    - I can read multi-digit whole numbers using numerals, number names, unit form, and expanded form.
    - I can use symbols to compare numbers.
    - I can write multi-digit whole numbers using numerals, number names, unit form, and expanded form.

Students will know:

- Strategies for adding, subtracting, multiplying, and dividing whole numbers
- Estimation strategies
- Letters can be used to represent unknown numbers
- Division problems may have remainders which are fractional parts
- Some problems require more than one step to solve them
- Place value is a pattern of multiplying by 10
- A number can be represented in various forms
    - Standard
    - Unit
    - Expanded
    - Word
- Symbols (>, =, <) can be used to compare numbers.

Students will be able to:

- Add, subtract, multiply, and divide whole numbers.
- Make sense of and solve a multi-step word problem.
- Determine appropriate operation(s).

- Interpret remainders.
- Determine reasonableness of answers.
- Write an equation to represent a multi-step word problem
- Understand the value of a digit is determined by its place.
- Use place value to multiply and divide.
- Read multi-digit whole numbers in various forms: unit, standard, expanded, and word.
- Write multi-digit whole numbers in various forms: unit, standard, expanded, and word.
- Compare two multi-digit whole numbers in various forms: unit, standard, expanded, and word.

Vocabulary/Terminology to note:

- **Multiplication**: "10 × 100" means "100 + 100 + 100 + 100 + 100 + 100 + 100 + 100 + 100 + 100"
- **Partitive Division**: The unknown size of each group when given the total and the number of equal groups (number of *parts* is known); Example: "4,000 ÷ 10 = __" means "10 × __ = 4,000"
- **Measurement Division**: The unknown number of equal groups when given the total and the size of each group (how much to *measure* is known). Example: "4,000 ÷ 10 = __" means "__ × 10 = 4,000"
- **Standard form of a number** (base-ten numeral): "standard form (or base-ten numeral) of 12,345" is "12,345"
- **Word form of a number** (number name): "word form (or number name) of 12,345" is "twelve-thousand three hundred forty-five"
- **Expanded form of a number**: "expanded form of 12,345" is "10,000 + 2,000 + 300 + 40 + 5"

Additional Arkansas Standards

- 4.NBT.A.3 Use place value understanding to round multi-digit whole numbers to any place.
- 4.NBT.B.4 Add and subtract multi-digit whole numbers with computational fluency using a standard algorithm. *Notes: Computational fluency is defined as a student's ability to efficiently and accurately solve a problem with some degree of flexibility with their strategies. A standard algorithm can be viewed as, but should not be limited to, the traditional recording system. A standard algorithm denotes any valid base-ten strategy.*

Module 2	Unit Conversions	Grade Level	4	Dates	Approximately 7 days

CPSD Power Standards and Learning Indicators

- 4.MD.A.1 Know relative sizes of measurement units within one system of units including km, m, cm; kg, g; lb, oz.; l, ml; hr, min, sec; yd, ft, in; gal, qt, pt, c. Within a single system of measurement, express measurements in the form of a larger unit in terms of a smaller unit. Record measurement equivalents in a two-column table For example: Know that 1 ft is 12 times as long as 1 in. Express the length of a 4 ft snake as 48 in. Generate a conversion table for feet and inches listing the number pairs (1, 12), (2, 24), and (3, 36).
    - I can describe length, capacity, mass, and time using appropriate units.
    - I can determine relative sizes of measurement within one system of units.
    - I can convert measurements of a larger unit to a smaller unit.

Students will know:

- Approximate benchmarks for how large/small a measurement unit is
- Relationships among units is measuring within the same systems
- Multiplication (measure increases) and division (measure decreases) is used to convert within the same system
- Metric system is unique in to measuring in the base ten system

Students will be able to:

- Quantify and describe the size of a measurement in relationship to units within the same system.
- Convert within the same system using multiplication and division.
- Create a two-column table to express equivalent measures.

Vocabulary/Terminology to note:

- Metric length units:
    - Meter, centimeter: 1 meter = 100 centimeter
    - Kilometer: 1,000 meters = 1 kilometer
- Metric mass (weight) units:
    - Gram, kilogram: 1,000 grams = 1 kilogram
- Metric capacity (volume) units:
    - Liter, milliliter: 1 liter = 1,000 milliliters
- Mixed unit:
    - Mixed unit is shorthand for writing a sum of two units. Example: “2 km 5 m” means “2 km + 5 m”
    - We make as many of the larger unit as possible. Example: 2005 m as a mixed unit is 2 km 5 m and not 1 km 1005 m
- Unit conversion: to convert 1 km 500 m to meters means to find how long 1 km 500 m is in meters (1 km 500 m = ? m)

Additional Arkansas Standards

- 4.MD.A.2 Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money including the ability to make change; including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale Note: This is a standard that may be addressed throughout the year focusing on different context.

Module 3	Multi-digit multiplication and division	Grade Level	4	Dates	Approximately 43 days

CPSD Power Standards and Learning Indicators

- 4.OA.A.3 Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.
    - I can solve multi-step word problems using the four operations.
    - I can make sense of remainders.
    - I can determine the reasonableness of answers.
- 4.OA.B.4 Find all factor pairs for a whole number in the range 1-100. Recognize that a whole number is a multiple of each of its factors.Determine whether a given whole number in the range 1-100 is a multiple of a given one-digit number. Determine whether a given whole number in the range 1-100 is prime or composite. *Note: Informal classroom discussion might include divisibility rules, finding patterns and other strategies.*
    - I can find factor pairs for numbers 1-100.
    - I can recognize a whole number as a multiple of each of its factors.
    - I can decide whether a whole number (1-100) is a multiple of a given one-digit number.
    - I can determine if a whole number (1-100) is prime or composite.
- 4.MD.A.3 Apply the area and perimeter formulas for rectangles in real world and mathematical problems. For example: Find the width of a rectangular room given the area of the flooring and the length, by viewing the area formula as a multiplication equation with an unknown factor.
    - I can use the formula for area of a rectangle to solve problems.
    - I can use the formula for perimeter of a rectangle to solve problems.
    - I can decide which formula to use to solve a certain problem.
    - I can use the correct units of measure in my answer.
    - I can use a formula as an equation to help me find a missing number.
    - I can solve an equation for a missing value.
- 4.NBT.B.5 Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and area models. *Note: Properties of operations need to be referenced.*
    - I can model and solve multiplication problems using equations, rectangular arrays, and area models.
- 4.NBT.B.6 Find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors, using strategies based on place value, the properties of operations, and the relationship between multiplication and division; illustrate and explain the calculation by using equations, rectangular arrays, and area models.
    - I can model and solve division problems using equations, rectangular arrays, and area models.

Students will know:

- Strategies for adding, subtracting, multiplying, and dividing whole numbers
- Estimation strategies
- Letters can be used to represent unknown numbers
- Division problems may have remainders which are fractional parts
- Some problems require more than one step to solve them

- A factor is a divisor of number.
- A multiple is a product of factors.
- A prime number is a number whose only factors are 1 and itself.
- A composite number is a number that is not prime.
- Area describes the amount of square units within the interior region of polygon and perimeter is the combined linear (straight line) distance around it
- How the dimensions of a rectangle are used to determine its area and perimeter
- Dimensions of a rectangle are relative to its position or orientation.
- Formulas
    - Area of a rectangle ($A = L \times W$)
    - Perimeter of a rectangle ($P = 2L + 2W$ or $P = L + W + L + W$)
- Strategies for multiplying and dividing whole numbers
    - Strategies based on properties of Operations (Distributive, Associative, Commutative, and Identity)
    - Area models
    - Rectangular arrays
    - Strategies based on place value

Students will be able to:

- Add, subtract, multiply, and divide whole numbers.
- Make sense of and solve a multi-step word problem.
- Determine appropriate operation(s).
- Interpret remainders.
- Determine reasonableness of answers.
- Write an equation to represent a multi-step word problem.
- Find all factor pairs for numbers 1-100
- Recognize that a whole number is a multiple of each of its factors
- Decide whether a whole number is a prime or composite number
- Decide whether a whole number is a multiple of a given one-digit number
- Compute area and perimeter of a rectangle using to solve a mathematical problem.
- Find a given dimension as an unknown factor or addend situation if given the area or perimeter and other dimension.
- Correctly label the attribute being found in an area or perimeter situation as a square or linear unit of measure.
- Illustrate and explain multiplication and division using
    - Equations
    - Rectangular arrays
    - Area models
- Apply place value and understanding of properties of operations when multiplying multi-digit numbers.

Vocabulary/Terminology to note:

- **Perimeter**: total length (number of unit lengths) around a figure

- **Area**: total number of unit squares that fit inside a figure (without overlap or extra space between)
- **Prime number**: a number that has exactly two factors, 1 and the number itself (Examples: 3, 5, 7)
- **Composite number**: a number that has at least one factor other than 1 and the number itself (Examples: 4, 6, 8, 9)

Additional Arkansas Standards

- 4.OA.A.1 Interpret a multiplication equation as a comparison (e.g., interpret 35 = 5 × 7 as a statement that 35 is 5 times as many as 7 and 7 times as many as 5). Represent verbal statements of multiplicative comparisons as multiplication equations.
- 4.OA.A.2 Multiply or divide to solve word problems involving multiplicative comparison. Use drawings and equations with a letter for the unknown number to represent the problem, distinguishing multiplicative comparison from additive comparison.

Module 4	Angle Measure and Plane Figures	Grade Level	4	Dates	Approximately 15 days

CPSD Power Standards and Learning Indicators

- 4.G.A.1 Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines; Identify these in 2D figures.
  - I can draw points, lines, line segments, rays, angles (acute, right, obtuse), parallel and perpendicular lines.
  - I can identify points, lines, line segments, rays, angles (acute, right, obtuse), parallel and perpendicular lines (in a two-dimensional figure).

Students will know:

- Shapes have attributes that allow them to be categorized.
- Through any two points there is always a line and every line contains at least two points
- Line segments are subsets of a line and have a beginning and ending point
- A line contains an infinite number of points and goes on forever.
- A ray is a part of a line with that has one endpoint and goes on forever in one direction
- An angle is a measured relationship of change between an initial and terminal ray with a common vertex
- Benchmark angles can be utilized to estimate angle measures as acute (less than 90^{o}), obtuse (greater than 90^{o}) and right (equal to 90^{o})
- Parallel lines never intersect and are the same distance apart.
- Perpendicular lines intersect to form a 90^{o} angle
- Appropriate geometric notations for representing angles, lines, rays, parallel and perpendicular lines

Students will be able to:

- Identify, model, and/or draw an example of: point, line, line segment, ray, angle, parallel lines, perpendicular lines, or angles.
- Identify and notate geometric attributes in a two-dimensional figure.

Additional Arkansas Standards

- 4.MD.C.5 Recognize angles as geometric shapes that are formed wherever two rays share a common endpoint, and understand concepts of angle measurement: An angle is measured with reference to a circle with its center at the common endpoint of the rays, by considering the fraction of the circular arc between the points where the two rays intersect the circle. An angle that turns through 1/360 of a circle is called a "one-degree angle," and can be used to measure angles. An angle that turns through n one-degree angles is said to have an angle measure of n degree Note: Use the degree symbol (e.g., 360°).
- 4.MD.C.6 Measure angles in whole-number degrees using a protractor. Sketch angles of specified measure
- 4.MD.C.7 Recognize angle measure as additive. When an angle is decomposed into non-overlapping parts, the angle measure of the whole is the sum of the angle measures of the parts. Solve addition and subtraction problems to find unknown angles on a diagram in real world and mathematical problems. *For example: Use an equation with a symbol for the unknown angle measure.*
- 4.G.A.2 Classify two-dimensional figures based on the presence or absence of parallel or perpendicular lines, or the presence or absence of angles of a specified size. Recognize right triangles as a category and identify right triangles. *Note: Trapezoids will be defined to be a quadrilateral with at least one pair of opposite sides parallel, therefore all parallelograms are trapezoids.*
- 4.G.A.3 Recognize a line of symmetry for a two-dimensional figure as a line across the figure such that the figure can be folded along the line into matching parts. Identify line-symmetric figures and draw lines of symmetry.

Module 5	Fraction equivalence, ordering, and operations	**Grade Level**	4	**Dates**	Approximately 45 days

CPSD Power Standards and Learning Indicators

- 4.NF.A.1 By using visual fraction models, explain why a fraction a/b is equivalent to a fraction (n × a)/(n × b) with attention to how the number and size of the parts differ even though the two fractions themselves are the same size; Use this principle to recognize and generate equivalent fractions. For example: 1/5 is equivalent to (2x1) / (2x5).
    - I can explain why fractions are equivalent in multiple ways. (e.g., using fraction models, multiplication, relationships)
- 4.NF.B.3 Understand a fraction a/b with a > 1 as a sum of fractions 1/b (e.g., 3/8=1/8+1/8+1/8); Understand addition and subtraction of fractions as joining and separating parts referring to the same whole; Decompose a fraction into a sum of fractions with the same denominator in more than one way, recording each decomposition by an equation and justify decompositions (e.g., by using a visual fraction model) (e.g., 3/8 = 1/8 + 1/8 + 1/8 ; 3/8 = 1/8 + 2/8 ; 2 1/8 = 1 + 1 + 1/8 = 8/8 + 8/8 + 1/8); Add and subtract mixed numbers with like denominators (e.g., by using properties of operations and the relationship between addition and subtraction and by replacing each number with an equivalent fraction); Solve word problems involving addition and subtraction of fractions referring to the same whole and having like denominators (e.g., by using visual fraction models and equations to represent the problem) *Note: Converting a mixed number to an improper fraction should not be viewed as a separate technique to be learned by rote memorization, but simply a case of fraction addition (e.g., 7 1/5 =7 + 1/5 = 35/5 + 1/5 = 36/5).*
    - I can break apart a fraction in different ways. (1st Example: ⅜= ⅛ + ⅛ + ⅛ ; 2nd Example: 1 ⅛ = 9/8 = 8/8+ 1/8; 3rd Example: 1/6 = 5/6 - 4/6)
    - I can write fractions in equivalent ways (including improper fractions, mixed numbers, and other forms of equivalence).
    - I can add and subtract fractions using models and equations.

Students will know:

- Functions of the numerator and denominator
- The connection between the denominator and its unit size
- Equivalent fractions may be generated by using a scalar multiple of both the numerator and denominator
- Equivalent fractions may be modeled by further subdividing an existing model
- Fractions can be decomposed in many ways similar to working with whole numbers.
- Equivalent relationships between mixed numbers and improper fractions.
- Fractions can be added or subtracted only when referring to the same whole.

Students will be able to:

- Use fraction models to determine and explain equivalent fractions.
- Find the connection between the denominator and its unit size to determine its equivalence to another fraction.
- Create an equivalent fraction using a scalar multiple, *n*, of the numerator and denominator.
- Decompose a fraction into a unit fraction or other fractional parts with and without using models.
- Solve word problems involving adding/subtracting fractions.
- Write an equation as a composition of fractions and operation(s).

Vocabulary/Terminology to note:

- A “fraction bar” means division. Division means fair/equal share.

Additional Arkansas Standards

- 4.OA.C.5 Generate a number or shape pattern that follows a given rule. Identify apparent features of the pattern that were not explicit in the rule itself. *For example: Given the rule "Add 3" and the starting number 1, generate terms in the resulting sequence and observe that the terms appear to alternate between odd and even numbers. Explain why the numbers will continue to alternate in this way.*
- 4.NF.A.2 Compare two *fractions* with different *numerators* and different *denominators* (e.g., by creating common *denominators* or *numerators*, or by comparing to a benchmark *fraction* such as ½). Recognize that comparisons are valid only when the two *fractions* refer to the same whole. Record the results of comparisons with symbols (>, =, <), and justify the conclusions (e.g., by using a *visual fraction model*).
- 4.NF.B.4 Understand a *fraction a/b* as a multiple of 1/b (e.g., Use a *visual fraction model* to represent 5/4 as the *product* 5 × (1/4), recording the conclusion by the equation 5/4 = 5 × (1/4)); Understand a multiple of a/b as a multiple of 1/b, and use this understanding to multiply a *fraction* by a whole number (e.g., Use a *visual fraction model* to express 3 × (2/5) as 6 × (1/5), recognizing this *product* as 6/5 (In general, n × (a/b) = (n × a)/b)); Solve word problems involving multiplication of a *fraction* by a whole number (e.g., by using *visual fraction models* and *equations* to represent the problem). *For example: If each person at a party will eat 3/8 of a pound of roast beef, and there will be 5 people at the party, how many pounds of roast beef will be needed? Between what two whole numbers does your answer lie? Note: Emphasis should be placed on the relationship of how the unit fraction relates to the multiple of the fraction.*
- 4.MD.A.2 Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money including the ability to make change; including problems involving simple *fractions* or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as *number line diagrams* that feature a measurement scale.
- 4.MD.B.4 Make a *line plot* to display a data set of measurements in *fractions* of a unit (e.g., 1/2, 1/4, 1/8). Solve problems involving addition and subtraction of *fractions* by using information presented in *line plots. For example: From a line plot, find and interpret the difference in length between the longest and shortest specimens in an insect collection.*

Module 6	Decimal Fractions	**Grade Level**	4	**Dates**	Approximately 20 days

CPSD Power Standards and Learning Indicators

- 4.NF.C.6 Use decimal notation for fractions with denominators 10 or 100 For example: Write 0.62 as 62/100; describe a length as 0.62 meters; locate 0.62 on a number line diagram.
    - I can use decimals to represent fractions with denominators 10 and 100.
    - I can locate decimal fractions on a number line diagram.
    - I can explain the relationship between a fraction and decimal.

Students will know:

- Decimals are unique fractions of powers of 10 representing our whole number base ten system
- Decimals and fractions both represents parts of a whole
- Decimal fractions are utilized to measure within the metric system
- Decimals can be modeled in similar ways as whole number and fraction situations
- Decimal point separates the whole number part from the fractional part of a number

Students will be able to:

- Explain the relationship between a fraction and decimal.
- Model decimal situations and measurements on a number line.
- Convert between the fractional form and decimal notation.
- Rewrite a decimal as a sum or difference of two fractions.

Vocabulary/Terminology to note:

- **Decimal fraction**: a fraction with a denominator that is a product of 10's (positive power of 10)

Additional Arkansas Standards

- 4.NF.C.5 Express a *fraction* with *denominator* 10 as an equivalent *fraction* with denominator 100, and use this technique to add two *fractions* with respective *denominators* 10 and 100. For example: Express 3/10 as 30/100, and add 3/10 + 4/100 = 34/100. *Note: Students who can generate equivalent fractions can develop strategies for adding fractions with unlike denominators in general. However, addition and subtraction with unlike denominators in general is not a requirement at this grade.*
- 4.NF.C.7 Compare two decimals to hundredths by reasoning about their size. Recognize that comparisons are valid only when the two decimals refer to the same whole. Record the results of comparisons using symbols (>, =, <), and justify the conclusions (e.g., by using a visual model).
- 4.MD.A.2 Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money including the ability to make change; including problems involving simple *fractions* or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as *number line diagrams* that feature a measurement scale.

Module 7	Exploring Measurement with Multiplication	Grade Level	4	Dates	Approximately 20 days

CPSD Power Standards and Learning Indicators

- 4.OA.A.3 Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.
    - I can solve multi-step word problems using the four operations.
    - I can make sense of remainders.
    - I can determine the reasonableness of answers.
- 4.MD.A.1 Know relative sizes of measurement units within one system of units including km, m, cm; kg, g; lb, oz.; l, ml; hr, min, sec; yd, ft, in; gal, qt, pt, c. Within a single system of measurement, express measurements in the form of a larger unit in terms of a smaller unit. Record measurement equivalents in a two-column table For example: Know that 1 ft is 12 times as long as 1 in. Express the length of a 4 ft snake as 48 in. Generate a conversion table for feet and inches listing the number pairs (1, 12), (2, 24), and (3, 36).
    - I can describe length, capacity, mass, and time using appropriate units.
    - I can determine relative sizes of measurement within one system of units.
    - I can convert measurements of a larger unit to a smaller unit.

Students will know:

- Strategies for adding, subtracting, multiplying, and dividing whole numbers
- Estimation strategies
- Letters can be used to represent unknown numbers
- Division problems may have remainders which are fractional parts
- Some problems require more than one step to solve them
- Approximate benchmarks for how large/small a measurement unit is
- Relationships among units is measuring within the same systems
- Multiplication (measure increases) and division (measure decreases) is used to convert within the same system
- Metric system is unique in to measuring in the base ten system

Students will be able to:

- Add, subtract, multiply, and divide whole numbers.
- Make sense of and solve a multi-step word problem.
- Determine appropriate operation(s).
- Interpret remainders.
- Determine reasonableness of answers.
- Write an equation to represent a multi-step word problem.
- Quantify and describe the size of a measurement in relationship to units within the same system.
- Convert within the same system using multiplication and division.
- Create a two-column table to express equivalent measures.

Additional Arkansas Standards
● 4.OA.A.1 Interpret a multiplication equation as a comparison (e.g., interpret 35 = 5 × 7 as a statement that 35 is 5 times as many as 7 and 7 times as many as 5). Represent verbal statements of multiplicative comparisons as multiplication equations. ● 4.OA.A.2 Multiply or divide to solve word problems involving multiplicative comparison. Use drawings and equations with a letter for the unknown number to represent the problem, distinguishing multiplicative comparison from additive comparison. ● 4.NBT.B.5 Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and area models Note: Properties of operations need to be referenced. ● 4.MD.A.2 Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money including the ability to make change; including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale. *Note: This is a standard that may be addressed throughout the year focusing on different context.*