

SIDE BY SIDE OF OKLAHOMA PASS STRANDS AND COMMON CORE STATE STANDARDS

PASS			Strand and Standard		
Strand	Standard #	PASS		Grade	Common Core State Standard
SEVENTH GRADE					
* Legends/Abbreviations can be found in a separate table.					
A	1	Standard 1: Algebraic Reasoning: Patterns and Relationships - The student will use number properties and algebraic reasoning to identify, simplify, and solve simple linear equations and inequalities.			
A	1.1	Identify, describe, and analyze functional relationships (linear and nonlinear) between two variables (e.g., as the value of x increases on a table, do the values of y increase or decrease, identify a positive rate of change on a graph and compare it to a negative rate of change).	RP.3a	6	Make tables of equivalent ratios relating quantities with whole-number measurements, find missing values in the tables, and plot the pairs of values on the coordinate plane. Use tables to compare ratios.
A	1.1	Identify, describe, and analyze functional relationships (linear and nonlinear) between two variables (e.g., as the value of x increases on a table, do the values of y increase or decrease, identify a positive rate of change on a graph and compare it to a negative rate of change).	EE.6	8	Understand the connections between proportional relationships, lines, and linear equations. Use similar triangles to explain why the slope m is the same between any two distinct points on a non-vertical line in the coordinate plane; derive the equation $y = mx$ for a line through the origin and the equation $y = mx + b$ for a line intercepting the vertical axis at b.
A	1.1	Identify, describe, and analyze functional relationships (linear and nonlinear) between two variables (e.g., as the value of x increases on a table, do the values of y increase or decrease, identify a positive rate of change on a graph and compare it to a negative rate of change).	F.1	8	Define, evaluate, and compare functions. Understand that a function is a rule that assigns to each input exactly one output. The graph of a function is the set of ordered pairs consisting of an input and the corresponding output. (Function notation is not required in Grade 8.)

SIDE BY SIDE OF OKLAHOMA PASS STRANDS AND COMMON CORE STATE STANDARDS

A	1.1	Identify, describe, and analyze functional relationships (linear and nonlinear) between two variables (e.g., as the value of x increases on a table, do the values of y increase or decrease, identify a positive rate of change on a graph and compare it to a negative rate of change).	F.3	8	Define, evaluate, and compare functions. Interpret the equation $y = mx + b$ as defining a linear function, whose graph is a straight line; give examples of functions that are not linear. For example, the function $A = s^2$ giving the area of a square as a function of its side length is not linear because its graph contains the points (1,1), (2,4) and (3,9), which are not on a straight line.
A	1.1	Identify, describe, and analyze functional relationships (linear and nonlinear) between two variables (e.g., as the value of x increases on a table, do the values of y increase or decrease, identify a positive rate of change on a graph and compare it to a negative rate of change).	F.4	8	Use functions to model relationships between quantities. Construct a function to model a linear relationship between two quantities. Determine the rate of change and initial value of the function from a description of a relationship or from two (x, y) values, including reading these from a table or from a graph. Interpret the rate of change and initial value of a linear function in terms of the situation it models, and in terms of its graph or a table of values.
A	1.2	Write and solve two-step equations with one variable using number sense, the properties of operations, and the properties of equality (e.g., $-2x + 4 = -2$).	EE.1	7	Use properties of operations to generate equivalent expressions. Apply properties of operations as strategies to add, subtract, factor, and expand linear expressions with rational coefficients.
A	1.2	Write and solve two-step equations with one variable using number sense, the properties of operations, and the properties of equality (e.g., $-2x + 4 = -2$).	EE.2	7	Use properties of operations to generate equivalent expressions. Understand that rewriting an expression in different forms in a problem context can shed light on the problem and how the quantities in it are related. For example, $a + 0.05a = 1.05a$ means that “increase by 5%” is the same as “multiply by 1.05.”

SIDE BY SIDE OF OKLAHOMA PASS STRANDS AND COMMON CORE STATE STANDARDS

A	1.2	Write and solve two-step equations with one variable using number sense, the properties of operations, and the properties of equality (e.g., $-2x + 4 = -2$).	EE.3	7	Solve real-life and mathematical problems using numerical and algebraic expressions and equations. Solve multi-step real-life and mathematical problems posed with positive and negative rational numbers in any form (whole numbers, fractions, and decimals), using tools strategically. Apply properties of operations as strategies to calculate with numbers in any form; convert between forms as appropriate; and assess the reasonableness of answers using mental computation and estimation strategies. For example: If a woman making \$25 an hour gets a 10% raise, she will make an additional $\frac{1}{10}$ of her salary an hour, or \$2.50, for a new salary of \$27.50. If you want to place a towel bar $9\frac{3}{4}$ inches long in the center of a door that is $27\frac{1}{2}$ inches wide, you will need to place the bar about 9 inches from each edge; this estimate can be used as a check on the exact computation.
A	1.2	Write and solve two-step equations with one variable using number sense, the properties of operations, and the properties of equality (e.g., $-2x + 4 = -2$).	EE.4	7	Solve real-life and mathematical problems using numerical and algebraic expressions and equations. Use variables to represent quantities in a real-world or mathematical problem, and construct simple equations and inequalities to solve problems by reasoning about the quantities.
A	1.2	Write and solve two-step equations with one variable using number sense, the properties of operations, and the properties of equality (e.g., $-2x + 4 = -2$).	EE.4a	7	Solve word problems leading to equations of the form $px + q = r$ and $p(x + q) = r$, where p , q , and r are specific rational numbers. Solve equations of these forms fluently. Compare an algebraic solution to an arithmetic solution, identifying the sequence of the operations used in each approach. For example, The perimeter of a rectangle is 54 cm. Its length is 6 cm. What is its width?
A	1.3	Inequalities: Model, write, solve, and graph one-step linear inequalities with one variable.	EE.5	6	Reason about and solve one-variable equations and inequalities. Understand solving an equation or inequality as a process of answering a question: which values from a specified set, if any, make the equation or inequality true? Use substitution to determine whether a given number in a specified set makes an equation or inequality true.

SIDE BY SIDE OF OKLAHOMA PASS STRANDS AND COMMON CORE STATE STANDARDS

A	1.3	Inequalities: Model, write, solve, and graph one-step linear inequalities with one variable.	EE.6	6	Reason about and solve one-variable equations and inequalities. Use variables to represent numbers and write expressions when solving a real-world or mathematical problem; understand that a variable can represent an unknown number, or, depending on the purpose at hand, any number in a specified set.
A	1.3	Inequalities: Model, write, solve, and graph one-step linear inequalities with one variable.	EE.7	6	Reason about and solve one-variable equations and inequalities. Solve real-world and mathematical problems by writing and solving equations of the form $x + p = q$ and $px = q$ for cases in which p , q and x are all nonnegative rational numbers.
A	1.3	Inequalities: Model, write, solve, and graph one-step linear inequalities with one variable.	EE.8	6	Reason about and solve one-variable equations and inequalities. Write an inequality of the form $x > c$ or $x < c$ to represent a constraint or condition in a real-world or mathematical problem. Recognize that inequalities of the form $x > c$ or $x < c$ have infinitely many solutions; represent solutions of such inequalities on number line diagrams.
A	1.3	Inequalities: Model, write, solve, and graph one-step linear inequalities with one variable.	EE.4	7	Solve real-life and mathematical problems using numerical and algebraic expressions and equations. Use variables to represent quantities in a real-world or mathematical problem, and construct simple equations and inequalities to solve problems by reasoning about the quantities.
A	1.3	Inequalities: Model, write, solve, and graph one-step linear inequalities with one variable.	EE.4b	7	Solve word problems leading to inequalities of the form $px + q > r$ or $px + q < r$, where p , q , and r are specific rational numbers. Graph the solution set of the inequality and interpret it in the context of the problem. For example, As a salesperson, you are paid \$50 per week plus \$3 per sale. This week you want your pay to be at least \$100. Write an inequality for the number of sales you need to make, and describe the solutions.
N	2	Standard 2: Number Sense and Operation - The student will use numbers and number relationships to solve a variety of problems.			

SIDE BY SIDE OF OKLAHOMA PASS STRANDS AND COMMON CORE STATE STANDARDS

N	2.1a	Number Sense: Compare and order positive and negative rational numbers.	NS.5	6	Apply and extend previous understandings of numbers to the system of rational numbers. Understand that positive and negative numbers are used together to describe quantities having opposite directions or values (e.g., temperature above/below zero, elevation above/below sea level, debits/credits, positive/negative electric charge); use positive and negative numbers to represent quantities in real-world contexts, explaining the meaning of 0 in each situation.
N	2.1a	Number Sense: Compare and order positive and negative rational numbers.	NS.6a	6	Recognize opposite signs of numbers as indicating locations on opposite sides of 0 on the number line; recognize that the opposite of the opposite of a number is the number itself, e.g., $-(-3) = 3$, and that 0 is its own opposite.
N	2.1a	Number Sense: Compare and order positive and negative rational numbers.	NS.7	6	Apply and extend previous understandings of numbers to the system of rational numbers. Understand ordering and absolute value of rational numbers.
N	2.1a	Number Sense: Compare and order positive and negative rational numbers.	NS.7a	6	Interpret statements of inequality as statements about the relative position of two numbers on a number line diagram. For example, interpret $-3 > -7$ as a statement that -3 is located to the right of -7 on a number line oriented from left to right.
N	2.1a	Number Sense: Compare and order positive and negative rational numbers.	NS.7b	6	Write, interpret, and explain statements of order for rational numbers in real-world contexts. For example, write $-3^{\circ}\text{C} > -7^{\circ}\text{C}$ to express the fact that -3°C is warmer than -7°C .
N	2.1a	Number Sense: Compare and order positive and negative rational numbers.	NS.1	7	Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers. Apply and extend previous understandings of addition and subtraction to add and subtract rational numbers; represent addition and subtraction on a horizontal or vertical number line diagram.

SIDE BY SIDE OF OKLAHOMA PASS STRANDS AND COMMON CORE STATE STANDARDS

N	2.1a	Number Sense: Compare and order positive and negative rational numbers.	NS.1	8	Know that there are numbers that are not rational, and approximate them by rational numbers. Know that numbers that are not rational are called irrational. Understand informally that every number has a decimal expansion; for rational numbers show that the decimal expansion repeats eventually, and convert a decimal expansion which repeats eventually into a rational number.
N	2.1b	Number Sense: Build and recognize models of perfect squares to find their square roots and estimate the square root of other numbers (e.g., the square root of 12 is between 3 and 4).	NS.2	8	Know that there are numbers that are not rational, and approximate them by rational numbers. Use rational approximations of irrational numbers to compare the size of irrational numbers, locate them approximately on a number line diagram, and estimate the value of expressions (e.g., π^2). For example, by truncating the decimal expansion of $\sqrt{2}$ (square root of 2), show that $\sqrt{2}$ is between 1 and 2, then between 1.4 and 1.5, and explain how to continue on to get better approximations.
N	2.1b	Number Sense: Build and recognize models of perfect squares to find their square roots and estimate the square root of other numbers (e.g., the square root of 12 is between 3 and 4).	EE.2	8	Work with radicals and integer exponents. Use square root and cube root symbols to represent solutions to equations of the form $x^2 = p$ and $x^3 = p$, where p is a positive rational number. Evaluate square roots of small perfect squares and cube roots of small perfect cubes. Know that $\sqrt{2}$ is irrational.
N	2.1c	*Number Sense: Demonstrate the concept of ratio and proportion with models (e.g., similar geometric shapes, scale models).	RP.1	6	Understand ratio concepts and use ratio reasoning to solve problems. Understand the concept of a ratio and use ratio language to describe a ratio relationship between two quantities. For example, “The ratio of wings to beaks in the bird house at the zoo was 2:1, because for every 2 wings there was 1 beak.” “For every vote candidate A received, candidate C received nearly three votes.”

SIDE BY SIDE OF OKLAHOMA PASS STRANDS AND COMMON CORE STATE STANDARDS

N	2.1c	*Number Sense: Demonstrate the concept of ratio and proportion with models (e.g., similar geometric shapes, scale models).	RP.2	6	Understand ratio concepts and use ratio reasoning to solve problems. Understand the concept of a unit rate a/b associated with a ratio $a:b$ with $b \neq 0$ (b not equal to zero), and use rate language in the context of a ratio relationship. For example, "This recipe has a ratio of 3 cups of flour to 4 cups of sugar, so there is $3/4$ cup of flour for each cup of sugar." "We paid \$75 for 15 hamburgers, which is a rate of \$5 per hamburger." (Expectations for unit rates in this grade are limited to non-complex fractions.)
N	2.1c	*Number Sense: Demonstrate the concept of ratio and proportion with models (e.g., similar geometric shapes, scale models).	RP.3	6	Understand ratio concepts and use ratio reasoning to solve problems. Use ratio and rate reasoning to solve real-world and mathematical problems, e.g., by reasoning about tables of equivalent ratios, tape diagrams, double number line diagrams, or equations.
N	2.1c	*Number Sense: Demonstrate the concept of ratio and proportion with models (e.g., similar geometric shapes, scale models).	RP.1	7	Analyze proportional relationships and use them to solve real-world and mathematical problems. Compute unit rates associated with ratios of fractions, including ratios of lengths, areas and other quantities measured in like or different units. For example, if a person walks $1/2$ mile in each $1/4$ hour, compute the unit rate as the complex fraction $(1/2)/(1/4)$ miles per hour, equivalently 2 miles per hour.
N	2.1c	*Number Sense: Demonstrate the concept of ratio and proportion with models (e.g., similar geometric shapes, scale models).	G.1	7	Draw, construct, and describe geometrical figures and describe the relationships between them. Solve problems involving scale drawings of geometric figures, including computing actual lengths and areas from a scale drawing and reproducing a scale drawing at a different scale.

SIDE BY SIDE OF OKLAHOMA PASS STRANDS AND COMMON CORE STATE STANDARDS

N	2.2a	Number Operations: Solve problems using ratios and proportions.	RP.2	6	Understand ratio concepts and use ratio reasoning to solve problems. Understand the concept of a unit rate a/b associated with a ratio $a:b$ with $b \neq 0$ (b not equal to zero), and use rate language in the context of a ratio relationship. For example, "This recipe has a ratio of 3 cups of flour to 4 cups of sugar, so there is $3/4$ cup of flour for each cup of sugar." "We paid \$75 for 15 hamburgers, which is a rate of \$5 per hamburger." (Expectations for unit rates in this grade are limited to non-complex fractions.)
N	2.2a	Number Operations: Solve problems using ratios and proportions.	RP.3	6	Understand ratio concepts and use ratio reasoning to solve problems. Use ratio and rate reasoning to solve real-world and mathematical problems, e.g., by reasoning about tables of equivalent ratios, tape diagrams, double number line diagrams, or equations.
N	2.2a	Number Operations: Solve problems using ratios and proportions.	RP.3a	6	Make tables of equivalent ratios relating quantities with whole-number measurements, find missing values in the tables, and plot the pairs of values on the coordinate plane. Use tables to compare ratios.
N	2.2a	Number Operations: Solve problems using ratios and proportions.	RP.1	7	Analyze proportional relationships and use them to solve real-world and mathematical problems. Compute unit rates associated with ratios of fractions, including ratios of lengths, areas and other quantities measured in like or different units. For example, if a person walks $1/2$ mile in each $1/4$ hour, compute the unit rate as the complex fraction $(1/2)/(1/4)$ miles per hour, equivalently 2 miles per hour.
N	2.2a	Number Operations: Solve problems using ratios and proportions.	Rp.2	7	Analyze proportional relationships and use them to solve real-world and mathematical problems. Recognize and represent proportional relationships between quantities.

SIDE BY SIDE OF OKLAHOMA PASS STRANDS AND COMMON CORE STATE STANDARDS

N	2.2a	Number Operations: Solve problems using ratios and proportions.	RP.2a	7	Decide whether two quantities are in a proportional relationship, e.g., by testing for equivalent ratios in a table or graphing on a coordinate plane and observing whether the graph is a straight line through the origin.
N	2.2b	Number Operations: Solve percent application problems (e.g., discounts, tax, finding the missing value of percent/part/whole).	RP.3b	6	Solve unit rate problems including those involving unit pricing and constant speed. For example, If it took 7 hours to mow 4 lawns, then at that rate, how many lawns could be mowed in 35 hours? At what rate were lawns being mowed?
N	2.2b	Number Operations: Solve percent application problems (e.g., discounts, tax, finding the missing value of percent/part/whole).	RP.3	7	Analyze proportional relationships and use them to solve real-world and mathematical problems. Use proportional relationships to solve multistep ratio and percent problems. Examples: simple interest, tax, markups and markdowns, gratuities and commissions, fees, percent increase and decrease, percent error.
N	2.2c	Number Operations: Simplify numerical expressions with integers, exponents, and parentheses using order of operations.	EE.2c	6	Evaluate expressions at specific values for their variables. Include expressions that arise from formulas in real-world problems. Perform arithmetic operations, including those involving whole-number exponents, in the conventional order when there are no parentheses to specify a particular order (Order of Operations). For example, use the formulas $V = s^3$ and $A = 6s^2$ to find the volume and surface area of a cube with sides of length $s = 1/2$.
G	3	Standard 3: Geometry - The student will apply the properties and relationships of plane geometry in a variety of contexts.			
G	3.1	Classify regular and irregular geometric figures including triangles and quadrilaterals according to their sides and angles.			
G	3.2	Identify and analyze the angle relationships formed by parallel lines cut by a transversal (e.g., alternate interior angles, alternate exterior angles, adjacent, and vertical angles).	G.5	7	Solve real-life and mathematical problems involving angle measure, area, surface area, and volume. Use facts about supplementary, complementary, vertical, and adjacent angles in a multi-step problem to write and solve simple equations for an unknown angle in a figure.

SIDE BY SIDE OF OKLAHOMA PASS STRANDS AND COMMON CORE STATE STANDARDS

G	3.2	Identify and analyze the angle relationships formed by parallel lines cut by a transversal (e.g., alternate interior angles, alternate exterior angles, adjacent, and vertical angles).	G.5	8	Understand congruence and similarity using physical models, transparencies, or geometry software. Use informal arguments to establish facts about the angle sum and exterior angle of triangles, about the angles created when parallel lines are cut by a transversal, and the angle-angle criterion for similarity of triangles. For example, arrange three copies of the same triangle so that the three angles appear to form a line, and give an argument in terms of transversals why this is so.
G	3.3	Construct geometric figures and identify geometric transformations on the rectangular coordinate plane (e.g., rotations, translations, reflections, magnifications).	NS.6b	6	Understand signs of numbers in ordered pairs as indicating locations in quadrants of the coordinate plane; recognize that when two ordered pairs differ only by signs, the locations of the points are related by reflections across one or both axes.
G	3.3	Construct geometric figures and identify geometric transformations on the rectangular coordinate plane (e.g., rotations, translations, reflections, magnifications).	G.1	8	Understand congruence and similarity using physical models, transparencies, or geometry software. Verify experimentally the properties of rotations, reflections, and translations: -- a. Lines are taken to lines, and line segments to line segments of the same length. -- b. Angles are taken to angles of the same measure. -- c. Parallel lines are taken to parallel lines.
G	3.3	Construct geometric figures and identify geometric transformations on the rectangular coordinate plane (e.g., rotations, translations, reflections, magnifications).	G.3	8	Understand congruence and similarity using physical models, transparencies, or geometry software. Describe the effect of dilations, translations, rotations and reflections on two-dimensional figures using coordinates.
M	4	Standard 4: Measurement - The student will use measurement to solve problems in a variety of contexts.			
M	4.1	Develop and apply the formulas for perimeter and area of triangles and quadrilaterals to solve problems.	G.1	6	Solve real-world and mathematical problems involving area, surface area, and volume. Find area of right triangles, other triangles, special quadrilaterals, and polygons by composing into rectangles or decomposing into triangles and other shapes; apply these techniques in the context of solving real-world and mathematical problems.

SIDE BY SIDE OF OKLAHOMA PASS STRANDS AND COMMON CORE STATE STANDARDS

M	4.1	Develop and apply the formulas for perimeter and area of triangles and quadrilaterals to solve problems.	G.2	6	Solve real-world and mathematical problems involving area, surface area, and volume. Find the volume of a right rectangular prism with fractional edge lengths by packing it with unit cubes of the appropriate unit fraction edge lengths, and show that the volume is the same as would be found by multiplying the edge lengths of the prism. Apply the formulas $V = l w h$
M	4.1	Develop and apply the formulas for perimeter and area of triangles and quadrilaterals to solve problems.	G.3	6	Solve real-world and mathematical problems involving area, surface area, and volume. Draw polygons in the coordinate plane given coordinates for the vertices; use coordinates to find the length of a side joining points with the same first coordinate or the same second coordinate. Apply these techniques in the context of solving real-world and mathematical problems.
M	4.1	Develop and apply the formulas for perimeter and area of triangles and quadrilaterals to solve problems.	G.4	6	Solve real-world and mathematical problems involving area, surface area, and volume. Represent three-dimensional figures using nets made up of rectangles and triangles, and use the nets to find the surface area of these figures. Apply these techniques in the context of solving real-world and mathematical problems.
M	4.1	Develop and apply the formulas for perimeter and area of triangles and quadrilaterals to solve problems.	G.4	7	Solve real-life and mathematical problems involving angle measure, area, surface area, and volume. Know the formulas for the area and circumference of a circle and use them to solve problems; give an informal derivation of the relationship between the circumference and area of a circle.
M	4.1	Develop and apply the formulas for perimeter and area of triangles and quadrilaterals to solve problems.	G.6	7	Solve real-life and mathematical problems involving angle measure, area, surface area, and volume. Solve real-world and mathematical problems involving area, volume and surface area of two- and three-dimensional objects composed of triangles, quadrilaterals, polygons, cubes, and right prisms.

SIDE BY SIDE OF OKLAHOMA PASS STRANDS AND COMMON CORE STATE STANDARDS

M	4.2	Apply the formula for the circumference and area of a circle to solve problems.	G.4	7	Solve real-life and mathematical problems involving angle measure, area, surface area, and volume. Know the formulas for the area and circumference of a circle and use them to solve problems; give an informal derivation of the relationship between the circumference and area of a circle.
M	4.3	Find the area and perimeter of composite figures to solve application problems.	MD.7	4	Geometric measurement: understand concepts of angle and measure angles. 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, e.g., by using an equation with a symbol for the unknown angle measure.
M	4.3	Find the area and perimeter of composite figures to solve application problems.	G.4	7	Solve real-life and mathematical problems involving angle measure, area, surface area, and volume. Know the formulas for the area and circumference of a circle and use them to solve problems; give an informal derivation of the relationship between the circumference and area of a circle.
D	5	Standard 5: Data Analysis - The student will use data analysis, probability, and statistics to interpret data in a variety of contexts.			
D	5.1	Data Analysis: Compare, translate, and interpret between displays of data (e.g., multiple sets of data on the same graph, data from subsets of the same population, combinations of diagrams, tables, charts, and graphs).	SP.4	6	Summarize and describe distributions. Display numerical data in plots on a number line, including dot plots, histograms, and box plots.

SIDE BY SIDE OF OKLAHOMA PASS STRANDS AND COMMON CORE STATE STANDARDS

D	5.1	Data Analysis: Compare, translate, and interpret between displays of data (e.g., multiple sets of data on the same graph, data from subsets of the same population, combinations of diagrams, tables, charts, and graphs).	SP.5	6	Summarize and describe distributions. Summarize numerical data sets in relation to their context, such as by: -- a. Reporting the number of observations. -- b. Describing the nature of the attribute under investigation, including how it was measured and its units of measurement. -- c. Giving quantitative measures of center (median and/or mean) and variability (interquartile range and/or mean absolute deviation), as well as describing any overall pattern and any striking deviations from the overall pattern with reference to the context in which the data was gathered. -- d. Relating the choice of measures of center and variability to the shape of the data distribution and the context in which the data was gathered.
D	5.1	Data Analysis: Compare, translate, and interpret between displays of data (e.g., multiple sets of data on the same graph, data from subsets of the same population, combinations of diagrams, tables, charts, and graphs).	SP.8	7	Investigate chance processes and develop, use, and evaluate probability models. Find probabilities of compound events using organized lists, tables, tree diagrams, and simulation.
D	5.1	Data Analysis: Compare, translate, and interpret between displays of data (e.g., multiple sets of data on the same graph, data from subsets of the same population, combinations of diagrams, tables, charts, and graphs).	SP.8b	7	Represent sample spaces for compound events using methods such as organized lists, tables and tree diagrams. For an event described in everyday language (e.g., “rolling double sixes”), identify the outcomes in the sample space which compose the event.
D	5.2	Probability: Determine the probability of an event involving "or", "and", or "not" (e.g., on a spinner with one blue, two red and two yellow sections, what is the probability of getting a red or a yellow?).	SP.7a	7	Develop a uniform probability model by assigning equal probability to all outcomes, and use the model to determine probabilities of events. For example, if a student is selected at random from a class, find the probability that Jane will be selected and the probability that a girl will be selected.

SIDE BY SIDE OF OKLAHOMA PASS STRANDS AND COMMON CORE STATE STANDARDS

D	5.2	Probability: Determine the probability of an event involving "or", "and", or "not" (e.g., on a spinner with one blue, two red and two yellow sections, what is the probability of getting a red or a yellow?).	SP.5	7	Investigate chance processes and develop, use, and evaluate probability models. Understand that the probability of a chance event is a number between 0 and 1 that expresses the likelihood of the event occurring. Larger numbers indicate greater likelihood. A probability near 0 indicates an unlikely event, a probability around 1/2 indicates an event that is neither unlikely nor likely, and a probability near 1 indicates a likely event.
D	5.2	Probability: Determine the probability of an event involving "or", "and", or "not" (e.g., on a spinner with one blue, two red and two yellow sections, what is the probability of getting a red or a yellow?).	SP.6	7	Investigate chance processes and develop, use, and evaluate probability models. Approximate the probability of a chance event by collecting data on the chance process that produces it and observing its long-run relative frequency, and predict the approximate relative frequency given the probability. For example, when rolling a number cube 600 times, predict that a 3 or 6 would be rolled roughly 200 times, but probably not exactly 200 times.
D	5.2	Probability: Determine the probability of an event involving "or", "and", or "not" (e.g., on a spinner with one blue, two red and two yellow sections, what is the probability of getting a red or a yellow?).	SP.7a	7	Investigate chance processes and develop, use, and evaluate probability models. Develop a probability model and use it to find probabilities of events. Compare probabilities from a model to observed frequencies; if the agreement is not good, explain possible sources of the discrepancy.
D	5.2	Probability: Determine the probability of an event involving "or", "and", or "not" (e.g., on a spinner with one blue, two red and two yellow sections, what is the probability of getting a red or a yellow?).	SP.7b	7	Develop a probability model (which may not be uniform) by observing frequencies in data generated from a chance process. For example, find the approximate probability that a spinning penny will land heads up or that a tossed paper cup will land open-end down. Do the outcomes for the spinning penny appear to be equally likely based on the observed frequencies?
D	5.2	Probability: Determine the probability of an event involving "or", "and", or "not" (e.g., on a spinner with one blue, two red and two yellow sections, what is the probability of getting a red or a yellow?).	SP.8	7	Investigate chance processes and develop, use, and evaluate probability models. Find probabilities of compound events using organized lists, tables, tree diagrams, and simulation.
D	5.2	Probability: Determine the probability of an event involving "or", "and", or "not" (e.g., on a spinner with one blue, two red and two yellow sections, what is the probability of getting a red or a yellow?).	SP.8a	7	Understand that, just as with simple events, the probability of a compound event is the fraction of outcomes in the sample space for which the compound event occurs.

SIDE BY SIDE OF OKLAHOMA PASS STRANDS AND COMMON CORE STATE STANDARDS

D	5.2	Probability: Determine the probability of an event involving "or", "and", or "not" (e.g., on a spinner with one blue, two red and two yellow sections, what is the probability of getting a red or a yellow?).	SP.8b	7	Represent sample spaces for compound events using methods such as organized lists, tables and tree diagrams. For an event described in everyday language (e.g., “rolling double sixes”), identify the outcomes in the sample space which compose the event.
D	5.2	Probability: Determine the probability of an event involving "or", "and", or "not" (e.g., on a spinner with one blue, two red and two yellow sections, what is the probability of getting a red or a yellow?).	S.CP.1	9-12	Understand independence and conditional probability and use them to interpret data. Describe events as subsets of a sample space (the set of outcomes) using characteristics (or categories) of the outcomes, or as unions, intersections, or complements of other events (“or,” “and,” “not”).*
D	5.2	Probability: Determine the probability of an event involving "or", "and", or "not" (e.g., on a spinner with one blue, two red and two yellow sections, what is the probability of getting a red or a yellow?).	S.CP.2	9-12	Understand independence and conditional probability and use them to interpret data. Understand that two events A and B are independent if the probability of A and B occurring together is the product of their probabilities, and use this characterization to determine if they are independent.*
D	5.2	Probability: Determine the probability of an event involving "or", "and", or "not" (e.g., on a spinner with one blue, two red and two yellow sections, what is the probability of getting a red or a yellow?).	S.CP.7	9-12	Use the rules of probability to compute probabilities of compound events in a uniform probability model. Apply the Addition Rule, $P(A \text{ or } B) = P(A) + P(B) - P(A \text{ and } B)$, and interpret the answer in terms of the
D	5.3	Central Tendency: Compute the mean, median, mode, and range for data sets and understand how additional data or outliers in a set may affect the measures of central tendency.	SP.3	6	Develop understanding of statistical variability. Recognize that a measure of center for a numerical data set summarizes all of its values with a single number, while a measure of variation describes how its values vary with a single number.

SIDE BY SIDE OF OKLAHOMA PASS STRANDS AND COMMON CORE STATE STANDARDS

D	5.3	Central Tendency: Compute the mean, median, mode, and range for data sets and understand how additional data or outliers in a set may affect the measures of central tendency.	SP.5	6	Summarize and describe distributions. Summarize numerical data sets in relation to their context, such as by: -- a. Reporting the number of observations. -- b. Describing the nature of the attribute under investigation, including how it was measured and its units of measurement. -- c. Giving quantitative measures of center (median and/or mean) and variability (interquartile range and/or mean absolute deviation), as well as describing any overall pattern and any striking deviations from the overall pattern with reference to the context in which the data was gathered. -- d. Relating the choice of measures of center and variability to the shape of the data distribution and the context in which the data was gathered.
			RP.2b	7	Identify the constant of proportionality (unit rate) in tables, graphs, equations, diagrams, and verbal descriptions of proportional relationships.
			RP.2c	7	Represent proportional relationships by equations. For example, if total cost t is proportional to the number n of items purchased at a constant price p , the relationship between the total cost and the number of items can be expressed as $t = pn$.
			RP.2d	7	Explain what a point (x, y) on the graph of a proportional relationship means in terms of the situation, with special attention to the points $(0, 0)$ and $(1, r)$ where r is the unit rate.
			SP.8c	7	Design and use a simulation to generate frequencies for compound events. For example, use random digits as a simulation tool to approximate the answer to the question: If 40% of donors have type A blood, what is the probability that it will take at least 4 donors to find one with type A blood?