

Mathematics 5-7

Number, Number Sense and Operations Standard

Students demonstrate number sense including an understanding of number systems and operations, and how they relate to one another. Students compute fluently and make reasonable estimates using paper and pencil, technology-supported and mental methods

5	6	7	BENCHMARK	When	Freq
<ul style="list-style-type: none"> Represent and compare numbers less than 0 by extending the number line and using familiar applications; e.g., temperature, owing money. 			A. Represent and compare numbers less than 0 through familiar applications and extending the number line.		3
<ul style="list-style-type: none"> Use models and visual representation to develop the concept of ratio as part-to-part and part-to-whole, and the concept of percent as part-to-whole. Use various forms of one to demonstrate the equivalence of fractions; e.g., $18/24=9/12$ \times $2/2$ \times $3/4 \times 6/6$ Identify and generate equivalent forms of fractions, decimals and percents. 			B. Compare, order and convert among fractions, decimals and percents.		4
	<ul style="list-style-type: none"> Describe what it means to find a specific percent of a number, using real-life examples. Use models and pictures to relate concepts of ratio, proportion and percent, including percents less than 1 and greater than 100. 		C. Develop meaning for percents, including percents greater than 100 and less than 1.		2
<ul style="list-style-type: none"> Use models and visual representation to develop the concept of ratio as part-to-part and part-to-whole, and the concept of percent as part-to-whole. 	<ul style="list-style-type: none"> Explain why a number is referred to as being rational, and recognize that the expression a/b can mean a parts of size $1/a$ each, a divided by b, or the ratio of a to b. Use models and pictures to relate concepts of ratio, proportion and percent, including percents less than 1 and greater than 100. Give examples of how ratios are used to represent comparison; e.g., part-to-part, part-to-whole, whole-to-part. 		D. Use models and pictures to relate concepts of ratio, proportion and percent.		9

Mathematics 5-7

Number, Number Sense and Operations Standard

Students demonstrate number sense including an understanding of number systems and operations, and how they relate to one another. Students compute fluently and make reasonable estimates using paper and pencil, technology-supported and mental methods

5	6	7	BENCHMARK	When	Freq
<ul style="list-style-type: none"> • Identify and use relationships between operations to solve problems. • Use order of operations, including use of parentheses, to simplify numerical expressions. 	<ul style="list-style-type: none"> • Use the order of operations, including the use of exponents, decimals and rational numbers, to simplify numerical expressions. 	<ul style="list-style-type: none"> • Use order of operations and properties to simplify numerical expressions involving integers, fractions and decimals. 	E. Use order of operations, including use of parenthesis and exponents to solve multi-step problems, and verify and interpret the results.		13
<ul style="list-style-type: none"> • Use commutative, associative, distributive, identity and inverse properties to simplify and perform computations. 			F. Apply number system properties when performing computations		1
<ul style="list-style-type: none"> • Recognize and identify perfect squares and their roots. 	<ul style="list-style-type: none"> • Decompose and recompose whole numbers using factors and exponents (e.g., $32 = 2 \times 2 \times 2 \times 2 \times 2 = 2^5$), and explain why squared means second power and cubed means third power. • Find and use the prime factorization of composite numbers. For example: <ul style="list-style-type: none"> ➤ Use the prime factorization to recognize the greatest common factor (GCF). ➤ Use the prime factorization to recognize the least common multiple (LCM). ➤ Apply the prime factorization to solve problems and explain solutions. 	<ul style="list-style-type: none"> • Represent and solve problem situations that can be modeled by and solved using concepts of absolute value, exponents and square roots (for perfect squares). 	G. Apply and explain the use of prime factorizations, common factors; and common multiples in problem situations.		4

Mathematics 5-7

Number, Number Sense and Operations Standard

Students demonstrate number sense including an understanding of number systems and operations, and how they relate to one another. Students compute fluently and make reasonable estimates using paper and pencil, technology-supported and mental methods

5	6	7	BENCHMARK	When	Freq
<ul style="list-style-type: none"> • Justify why fractions need common denominators to be added or subtracted. • Explain how place value is related to addition and subtraction of decimals. 	<ul style="list-style-type: none"> • Represent multiplication and division situations involving fractions and decimals with models and visual representations. • Develop and analyze algorithms for computing with fractions and decimals, and demonstrate fluency in their use. 	<ul style="list-style-type: none"> • Explain the meaning and effect of adding, subtracting, multiplying and dividing integers. • Develop and analyze algorithms for computing with percents and integers, and demonstrate fluency in their use. 	H. Use and analyze the steps in standard algorithms for computing with fractions, decimals and integers		16
<ul style="list-style-type: none"> • Round decimals to a given place value and round fractions (including mixed numbers) to the nearest half. • Use physical models, points of reference, and equivalent forms to add and subtract commonly used fractions with like and unlike denominators and decimals. • Estimate the results of computations involving whole numbers, fractions and decimals, using a variety of strategies. 	<ul style="list-style-type: none"> • Use simple expressions involving integers to represent and solve problems; e.g., if a running back loses 15 yards on the first carry but gains 8 yards on the second carry, what is the net gain/loss? • Perform fraction and decimal computations and justify their solutions; e.g., using manipulatives, diagrams, mathematical reasoning. • Estimate reasonable solutions to problem situations involving fractions and decimals. • Use proportional reasoning, ratios and percents to represent problem situations and determine the reasonableness of solutions. • Determine the percent of a number and solve related problems; e.g., find the percent markdown if the original price was \$140, and the sale price is \$100. 	<ul style="list-style-type: none"> • Simplify numerical expressions involving integers and use integers to solve real-life problems. • Solve problems using the appropriate form of a rational number (fraction, decimal or percent). • Represent and solve problem situations that can be modeled by and solved using concepts of absolute value, exponents and square roots (for perfect squares). 	I. Use a variety of strategies, including proportional reasoning, to estimate, compute, solve and explain solutions to problems involving integers, fractions, decimals and percents		28

Mathematics 5-7

Measurement Standard

Students estimate and measure to a required degree of accuracy and precision by selecting and using appropriate units, tools and technologies.

5	6	7	BENCHMARK	When	Freq
<ul style="list-style-type: none"> Identify and select appropriate units to measure angles. 		<ul style="list-style-type: none"> Select appropriate units for measuring derived measurements; e.g., miles per hour, revolutions per minute. 	A. Select appropriate units to measure angles, circumference, surface area, mass and volume, using: <ul style="list-style-type: none"> U.S. customary units; e.g., degrees, square feet, pounds, and other units as appropriate; metric units; e.g., square meters, kilograms and other units as appropriate 		6
<ul style="list-style-type: none"> Make conversions within the same measurement system while performing computations. 		<ul style="list-style-type: none"> Convert units of area and volume within the same measurement system using proportional reasoning and a reference table when appropriate; e.g., square feet to square yards, cubic meters to cubic centimeters. 	B. Convert units of length, area, volume, mass and time within the same measurement system		6
<ul style="list-style-type: none"> Use strategies to develop formulas for determining perimeter and area of triangles, rectangles and parallelograms, and volume of rectangular prisms. Use benchmark angles (e.g.; 45..., 90..., 120...) to estimate the measure of angles, and use a tool to measure and draw angles. 	<ul style="list-style-type: none"> Use strategies to develop formulas for finding circumference and area of circle, and to determine the area of sectors; e.g., 1/2 circle, 2/3 circle, 1/3 circle, 1/4 circle. Estimate perimeter or circumference and area for circles, triangles and quadrilaterals, and surface area and volume for prisms and cylinders by: <ul style="list-style-type: none"> ➤ estimating lengths using string or links, areas using tiles or grid, and volumes using cubes; ➤ measuring attributes (diameter, side lengths, or heights) and using established formulas for circles, triangles, rectangles, parallelograms and rectangular prisms. 	<ul style="list-style-type: none"> Use strategies to develop formulas for finding area of trapezoids and volume of cylinders and prisms. Develop strategies to find the area of composite shapes using the areas of triangles, parallelograms, circles and sectors. 	C. Identify appropriate tools and apply appropriate techniques for measuring angles, perimeter or circumference and area of triangles, quadrilaterals, circles and composite shapes, and surface area and volume of prisms and cylinders		13

Mathematics 5-7

Measurement Standard

Students estimate and measure to a required degree of accuracy and precision by selecting and using appropriate units, tools and technologies.

5	6	7	BENCHMARK	When	Freq
		<ul style="list-style-type: none"> Estimate a measurement to a greater degree of precision than the tool provides. 	D. Select a tool and measure accurately to a specified level of precision		6
<ul style="list-style-type: none"> Identify paths between points on a grid or coordinate plane and compare the lengths of the paths. 	<ul style="list-style-type: none"> Determine which measure (perimeter, area, surface area, volume) matches the context for a problem situation. 	<ul style="list-style-type: none"> Solve problems involving proportional relationships and scale factors. 	E. Select a tool and measure accurately to a specified level of precision		8
<ul style="list-style-type: none"> Demonstrate and describe the differences between covering the faces (surface area) and filling the interior (volume) of three-dimensional objects. Demonstrate understanding of the differences among linear units, square units and cubic units. 	<ul style="list-style-type: none"> Understand and describe the difference between surface area and volume. Describe what happens to the perimeter and area of a two-dimensional shape when the measurements of the shape are changed. 	<ul style="list-style-type: none"> Describe what happens to the surface area and volume of a three-dimensional object when the measurements of the object are changed. 	F. Analyze and explain what happens to area and perimeter or surface area and volume when the dimensions of an object are changed		7
<ul style="list-style-type: none"> Demonstrate and describe the differences between covering the faces (surface area) and filling the interior (volume) of three-dimensional objects. Demonstrate understanding of the differences among linear units, square units and cubic units. 	<ul style="list-style-type: none"> Understand and describe the difference between surface area and volume. Understand the difference between perimeter and area, and demonstrate that two shapes may have the same perimeter, but different areas or may have the same area, but different perimeters. 	<ul style="list-style-type: none"> Understand the difference between surface area and volume and demonstrate that two objects may have the same surface area, but different volumes or may have the same volume, but different surface areas. 	G. Understand and demonstrate the independence of perimeter and area for two-dimensional shapes and of surface area and volume for three-dimensional shapes		8

Mathematics 5-7

Geometry and Spatial Sense Standard

Students identify, classify, compare and analyze characteristics, properties and relationships of one-, two- and three-dimensional geometric figures and objects. Students use spatial reasoning, properties of geometric objects and transformations to analyze mathematical situations and solve problems.

5	6	7	BENCHMARK	When	Freq
<ul style="list-style-type: none"> Use standard language to describe line, segment, ray, angle, skew, parallel and perpendicular. Label vertex, rays, interior and exterior for an angle. 			A. Identify and label angle parts and the regions defined within the plane where the angle resides		7
<ul style="list-style-type: none"> Draw circles, and identify and determine relationships among the radius, diameter, center and circumference. 			B. Draw circles, and identify and determine the relationships among the radius, diameter, center and circumference		4
<ul style="list-style-type: none"> extend understanding of coordinate system to include points whose x or y values may be negative numbers. 			C. Specify locations and plot ordered pairs on a coordinate plane		2
<ul style="list-style-type: none"> Use standard language to describe line, segment, ray, angle, skew, parallel and perpendicular Use physical models to determine the sum of the interior angles of triangles and quadrilaterals. Understand that the measure of an angle is determined by the degree of rotation of an angle side rather than the length of either side. 	<ul style="list-style-type: none"> Classify and describe two-dimensional and three-dimensional geometric figures and objects by using their properties. Use standard language to define geometric vocabulary: vertex, face, altitude, diagonal, isosceles, equilateral, acute, obtuse, etc. Identify and define relationships between planes. 	<ul style="list-style-type: none"> Determine sufficient properties that define a specific two-dimensional figure or three-dimensional object. For example: <ul style="list-style-type: none"> Determine when one set of figures is a subset of another. Develop a set of properties that eliminates all but the desired figure. 	D. Identify, describe and classify types of line pairs, angles, two-dimensional figures and three-dimensional objects using their properties		10

Mathematics 5-7

Geometry and Spatial Sense Standard

Students identify, classify, compare and analyze characteristics, properties and relationships of one-, two- and three-dimensional geometric figures and objects. Students use spatial reasoning, properties of geometric objects and transformations to analyze mathematical situations and solve problems.

5	6	7	BENCHMARK	When	Freq
		<ul style="list-style-type: none"> Use proportional reasoning to describe and express relationships between parts and attributes of similar and congruent figures. Determine and use scale factors for similar figures to solve problems using proportional reasoning. 	E. Use proportions to express relationships among corresponding parts of similar figures		4
<ul style="list-style-type: none"> Describe and use properties of congruent figures to solve problems. 	<ul style="list-style-type: none"> Draw similar figures that model proportional relationships; e.g., model similar figures with a 1 to 2 relationship by sketching two of the same figure, one with corresponding sides twice the length of the other. 	<ul style="list-style-type: none"> Determine necessary conditions for congruence of triangles. Identify the line and rotation symmetries of two-dimensional figures to solve problems. 	F. Describe and use the concepts of congruence, similarity and symmetry to solve problems		7
<ul style="list-style-type: none"> Use physical models to determine the sum of the interior angles of triangles and quadrilaterals. 	<ul style="list-style-type: none"> Use multiple classification criteria to classify triangles. 	<ul style="list-style-type: none"> Use and demonstrate understanding of the properties of triangles. For example: <ul style="list-style-type: none"> Use Pythagorean Theorem to solve problems involving right triangles. Use triangle angle sum relationships to solve problems. Apply properties of congruent or similar triangles to solve problems involving missing lengths and angle measures. 	G. Describe and use the concepts of congruence, similarity and symmetry to solve problems		8
	<ul style="list-style-type: none"> Predict and describe sizes, positions and orientations of two-dimensional shapes after transformations. 	<ul style="list-style-type: none"> Perform translations, reflections, rotations and dilations of two-dimensional figures using a variety of methods (paper folding, tracing, graph paper). 	H. Predict and describe results (size, position, orientation) of transformations of two-dimensional figures		4

Mathematics 5-7

Geometry and Spatial Sense Standard

Students identify, classify, compare and analyze characteristics, properties and relationships of one-, two- and three-dimensional geometric figures and objects. Students use spatial reasoning, properties of geometric objects and transformations to analyze mathematical situations and solve problems.

5	6	7	BENCHMARK	When	Freq
<ul style="list-style-type: none"> Predict what three-dimensional object will result from folding a two-dimensional net. 	<ul style="list-style-type: none"> Build three-dimensional objects built with cubes and sketch the two-dimensional representations of each side. 	<ul style="list-style-type: none"> Draw representations of three-dimensional geometric objects from different views. 	I. Identify and draw three-dimensional objects from different views (top, side, front and perspective)		6
<ul style="list-style-type: none"> Describe and use properties of congruent figures to solve problems. 	<ul style="list-style-type: none"> Draw similar figures that model proportional relationships; e.g., model similar figures with 1 to 2 relationship by sketching two of the same figures, one with corresponding sides twice the length of the other. 	<ul style="list-style-type: none"> Use proportional reasoning to describe and express relationships between parts and attributes of similar and congruent figures. Determine and use scale factors for similar figures to solve problems using proportional reasoning. 	J. Apply properties of equality and proportionality to solve problems involving congruent or similar figures; e.g., create a scale drawing		8

Mathematics 5-7

Patterns, Functions and Algebra Standard

Students use patterns, relations and functions to model, represent and analyze problem situations that involve variable quantities. Students analyze, model and solve problems using various representations such as tables, graphs and equations

5	6	7	BENCHMARK	When	Freq
<ul style="list-style-type: none"> Justify a general rule for a pattern of a function by using physical materials, visual representations, words, tables or graphs. Use calculators or computers to develop patterns, and generalize them using tables and graphs. 	<ul style="list-style-type: none"> Represent and analyze patterns, rules and functions, using physical materials, tables and graphs. Use words and symbols to describe numerical and geometric patterns, rules and functions. 		A. Describe, extend and determine the rule for patterns and relationships occurring in numeric patterns, computation, geometry, graphs and other applications		5
<ul style="list-style-type: none"> Use variables as unknown quantities in general rules when describing patterns and other relationships. 		<ul style="list-style-type: none"> Represent and analyze patterns, rules and functions with words, tables, graphs and simple variable expressions. Generalize patterns by describing in words how to find the next term. 	B. Represent analyze and generalize a variety of patterns and functions with tables, graphs, words and symbolic rules		9
<ul style="list-style-type: none"> Create and interpret the meaning of equations and inequalities representing problem situations. 	<ul style="list-style-type: none"> Produce and interpret graphs that represent the relationship between two variables. Evaluate simple expressions by replacing variables with given values, and use formulas in problem-solving situations. 		C. Use variables to create and solve equations and inequalities representing problem situations		5
	<ul style="list-style-type: none"> Recognize and generate equivalent forms of algebraic expressions, and explain how the commutative, associative and distributive properties can be used to generate equivalent forms. 	<ul style="list-style-type: none"> Recognize a variety of uses for variables; e.g., placeholder for an unknown quantity in an equation, generalization for a pattern, formula. 	D. Use symbolic algebra to represent and explain mathematical relationships		3

Mathematics 5-7

Patterns, Functions and Algebra Standard

Students use patterns, relations and functions to model, represent and analyze problem situations that involve variable quantities. Students analyze, model and solve problems using various representations such as tables, graphs and equations

5	6	7	BENCHMARK	When	Freq
<ul style="list-style-type: none"> Use variables as unknown quantities in general rules when describing patterns and other relationships. 	<ul style="list-style-type: none"> Use words and symbols to describe numerical and geometric patterns, rules and functions. 	<ul style="list-style-type: none"> Recognize and explain when numerical patterns are linear or nonlinear progressions. 	E. Use rules and variables to describe patterns, functions and other relationships		8
<ul style="list-style-type: none"> Model problems with physical materials and visual representations, and use models, graphs and tables to draw conclusions and make predictions. 		<ul style="list-style-type: none"> Represent linear equations by plotting points in the coordinate plane. Represent inequalities on a number line or a coordinate plane. 	F. Use representations, such as tables, graphs and equations, to model situations and to solve problems, especially those that involve linear relationships		7
<ul style="list-style-type: none"> Use variables as unknown quantities in general rules when describing patterns and other relationships. 	<ul style="list-style-type: none"> Evaluate simple expressions by replacing variables with given values, and use formulas in problem-solving situations. 	<ul style="list-style-type: none"> Represent and analyze patterns, rules and functions with words, tables, graphs and simple variable expressions. Justify that two forms of an algebraic expression are equivalent, and recognize with an expression is simplified. 	G. Write, simplify and evaluate algebraic expressions		3
	<ul style="list-style-type: none"> Solve simple linear equations and inequalities using physical models, paper and pencil, tables and graphs. 	<ul style="list-style-type: none"> Create visual representations of equation-solving processes that model the use of inverse operations. 	H. Solve linear equations and inequalities symbolically, graphically and numerically		3
		<ul style="list-style-type: none"> Create visual representations of equation-solving processes that model the use of inverse operations. 	I. Explain how inverse operations are used to solve linear equations		0

Patterns, Functions and Algebra Standard

Students use patterns, relations and functions to model, represent and analyze problem situations that involve variable quantities. Students analyze, model and solve problems using various representations such as tables, graphs and equations

5	6	7	BENCHMARK	When	Freq
	<ul style="list-style-type: none"> Evaluate simple expressions by replacing variables with given values, and use formulas in problem-solving situations. 	<ul style="list-style-type: none"> Use formulas in problem-solving situations. 	J. Use formulas in problem-solving situations		4
<ul style="list-style-type: none"> Model problems with physical materials and visual representations, and use models, graphs and tables to draw conclusions and make predictions. 	<ul style="list-style-type: none"> Solve simple linear equations and inequalities using physical models, paper and pencil, tables and graphs. Produce and interpret graphs that represent the relationship between two variables. 	<ul style="list-style-type: none"> Represent linear equations by plotting points in the coordinate plane. Represent inequalities on a number line or a coordinate plane. 	K. Graph linear equations and inequalities		4
<ul style="list-style-type: none"> Describe how the quantitative change in a variable affects the value of a related variable; e.g., describe how the rate of growth varies over time, based upon data in a table or graph. 	<ul style="list-style-type: none"> Identify, describe and compare situations with constant or varying rates of change. 	<ul style="list-style-type: none"> Analyze linear and simple nonlinear relationships to explain how a change in one variable results in the change of another. 	L. Analyze functional relationships, and explain how a change in one quantity results in a change in the other		5
	<ul style="list-style-type: none"> Use technology to analyze change. 	<ul style="list-style-type: none"> Use graphing calculators or computers to analyze change. 	M. Approximate and interpret rates of change from graphical and numerical data		4

Mathematics 5-7

Data Analysis and Probability Standard

Students pose questions and collect, organize, represent, interpret and analyze data to answer those questions. Students develop and evaluate inferences, predictions and arguments that are based on data.

5	6	7	BENCHMARK	When	Freq
<ul style="list-style-type: none"> Read, construct and interpret frequency tables, circle graphs and line graphs. 	<ul style="list-style-type: none"> Read, construct and interpret line graphs, circle graphs and histograms. 	<ul style="list-style-type: none"> Read, create and interpret box-and-whisker plots, stem-and-leaf plots, and other types of graphs when appropriate. 	A. Read, create and use line graphs, histograms, circle graphs, box-and-whisker plots, stem-and-leaf plots, and other representations when appropriate		11
	<ul style="list-style-type: none"> Describe the frequency distribution of a set of data, as shown in a histogram or frequency table, by general appearance or shape. 	<ul style="list-style-type: none"> Construct opposing arguments based on analysis of the same data, using different graphical representations. 	B. Interpret data by looking for patterns and relationships, draw and justify conclusions, and answer related questions		3
<ul style="list-style-type: none"> Modify initial conclusions, propose and justify new interpretations and predictions as additional data are collected. 			C. Interpret data by looking for patterns and relationships, draw and justify conclusions, and answer related questions		2
<ul style="list-style-type: none"> Read and interpret increasingly complex displays of data, such as double bar graphs. 	<ul style="list-style-type: none"> Compare representations of the same data in different types of graphs, such as a bar graph and circle graph. 	<ul style="list-style-type: none"> Compare data from two or more samples to determine how sample selection can influence results. 	D. Compare increasingly complex displays of data, such as multiple sets of data on the same graph		5

Mathematics 5-7

Data Analysis and Probability Standard

Students pose questions and collect, organize, represent, interpret and analyze data to answer those questions. Students develop and evaluate inferences, predictions and arguments that are based on data.

5	6	7	BENCHMARK	When	Freq
<ul style="list-style-type: none"> Select and use a graph that is appropriate for the type of data to be displayed; e.g., numerical vs. categorical data, discrete vs. continuous data. Determine appropriate data to be collected to answer questions posed by students or teacher, collect and display data, and clearly communicate findings. 	<ul style="list-style-type: none"> Select, create and use graphical representations that are appropriate for the type of data collected. 	<ul style="list-style-type: none"> Analyze how decisions about graphing affect the graphical representation. 	E. Collect, organize, display and interpret data for a specific purpose or need		8
<ul style="list-style-type: none"> Determine and use the range, mean, median and mode, and explain what each does and does not indicate about the set of data. 	<ul style="list-style-type: none"> Understand the different information provided by measures of center (mean, mode and median) and measures of spread (range). 	<ul style="list-style-type: none"> Analyze a set of data by using and comparing combinations of measures of center (mean, mode, median) and measures of spread (range, quartile, interquartile range), and describe how the inclusion or exclusion of outliers affects those measures. 	F. Determine and use the range, mean, median and mode to analyze and compare data, and explain what each indicates about the data		10
	<ul style="list-style-type: none"> Make logical inferences from statistical data. 	<ul style="list-style-type: none"> Analyze how decisions about graphing affect the graphical representation. Identify misuses of statistical data in articles, advertisements, and other media. 	G. Evaluate conjectures and predictions based upon data presented in tables and graphs, and identify misuses of statistical data and displays		5
<ul style="list-style-type: none"> List and explain all possible outcomes in a given situation. 			H. Find all possible outcomes of simple experiments or problem situations, using methods such as lists, arrays and tree diagrams		4

Mathematics 5-7

Data Analysis and Probability Standard

Students pose questions and collect, organize, represent, interpret and analyze data to answer those questions. Students develop and evaluate inferences, predictions and arguments that are based on data.

5	6	7	BENCHMARK	When	Freq
<ul style="list-style-type: none"> Identify the probability of events within a simple experiment, such as three chances out of eight. Use 0, 1 and ratios between 0 and 1 to represent the probability of outcomes for an event, and associate the ratio with the likelihood of the outcome. 		<ul style="list-style-type: none"> Compute probabilities of compound events; e.g., multiple coin tosses or multiple rolls of number cubes, using such methods as organized lists, tree diagrams and area models. 	I. Describe the probability of an event using ratios, including fractional notation		4
<ul style="list-style-type: none"> Compare what should happen with what did happen in a simple experiment. 			J. Compare experimental and theoretical results for a variety of simple experiments.		4
<ul style="list-style-type: none"> Make predictions based on experimental and theoretical probabilities. 	<ul style="list-style-type: none"> Design an experiment to test a theoretical probability and explain how the results may vary. 	<ul style="list-style-type: none"> Make predictions based on theoretical probabilities, design and conduct an experiment to test the predictions, compare actual results to predicted results, and explain differences. 	K. Make and justify predictions based on experimental and theoretical probabilities		6