Content Area:	MATHEMATICS	Grade Level:	7
Domain:	Ratios and Proportional Relationships		
Cluster:	Analyze proportional relationships and use them to solve real-world and mathematical problems.		

Common Core State Standards in Mathematics (CCSSM)

7.RP.1 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.*

7.RP.2 Recognize and represent proportional relationships between quantities.

a. 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.
b. Identify the constant of proportionality (unit rate) in tables, graphs, equations, diagrams, and verbal descriptions of proportional relationships.
c. 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.*
d. 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.

7.RP.3 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.

Understandings: Students will understand…	Essential Questions
• the two measurements that create a unit rate are always different, e.g., miles per gallon, dollars per hour. • ratios and percent represent the same information in different formats. • unit rates allow for comparison of proportional relationships.	• What is the purpose of finding a unit rate? • Why are the two measurements in a unit rate different?
Knowledge: Students will know…	**Skills: Students will be able to…**

• a unit rate is a ratio with a denominator of 1.
• a rate is a ratio that is used to compare different kinds of quantities.
• when a graph on a coordinate plane is a line, it indicates a proportional relationship.
• the equation $\frac{a}{b} = c$ can be rewritten as $a = bc$.
• in a proportional relationship, when connecting the points $(0, 0)$ and $(1, r)$, r is the unit rate.
	• compute unit rates associated with ratios of fractional
	  o lengths.
	  o areas.
	  o quantities measured in like or different units.
	• determine whether two ratios are equivalent.
	• decide whether two quantities are in a proportional relationship.
	• identify the constant of proportionality (unit rate) in tables, graphs, equations, diagrams, and verbal descriptions of proportional relationships.
	• represent proportional relationships by equations.
	• explain what a point (x, y) on the graph of a proportional relationship means in terms of the situation.
	• use proportional relationships to solve multistep ratio problems.
	• use proportional relationships to solve multistep percent problems.

RESOURCES

- Variables and Patterns; Stretching and Shrinking Investigations 4 and 5; Comparing and Scaling; Moving Straight Ahead

Content Area:	MATHEMATICS	Grade Level:	7
Domain:	The Number System		
Cluster:	Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.		

Common Core State Standards in Mathematics (CCSSM)

7.NS.1 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.

a. Describe situations in which opposite quantities combine to make 0. *For example, a hydrogen atom has 0 charge because its two constituents are oppositely charged.*
b. Understand $p + q$ as the number located a distance $|q|$ from p, in the positive or negative direction depending on whether q is positive or negative. Show that a number and its opposite have a sum of 0 (are additive inverses). Interpret sums of rational numbers by describing real-world contexts.
c. Understand subtraction of rational numbers as adding the additive inverse, $p - q = p + (-q)$. Show that the distance between two rational numbers on the number line is the absolute value of their difference, and apply this principle in real-world contexts.
d. Apply properties of operations as strategies to add and subtract rational numbers.

7.NS.2 Apply and extend previous understandings of multiplication and division and of fractions to multiply and divide rational numbers.

a. Understand that multiplication is extended from fractions to rational numbers by requiring that operations continue to satisfy the properties of operations, particularly the distributive property, leading to products such as $(-1)(-1) = 1$ and the rules for multiplying signed numbers. Interpret products of rational numbers by describing real-world contexts.
b. Understand that integers can be divided, provided that the divisor is not zero, and every quotient of integers (with non-zero divisor) is a rational number. If p and q are integers, then $-(p/q) = (-p)/q = p/(-q)$. Interpret quotients of rational numbers by describing real-world contexts.
c. Apply properties of operations as strategies to multiply and divide rational numbers.
d. Convert a rational number to a decimal using long division; know that the decimal form of a rational number terminates in 0s or eventually repeats.

7.NS.3 Solve real-world and mathematical problems involving the four operations with rational numbers.[1]

[1] Computations with rational numbers extend the rules for manipulating fractions to complex fractions.

Understandings: Students will understand...	Essential Questions
• $p + q$ is the number located a distance $\|q\|$ from p, in the positive or negative direction depending on whether q is positive or negative. • subtraction of rational numbers is the same as adding the additive inverse, $p - q = p + (-q)$. • properties of operations. • if a factor is multiplied by a number greater than one, the answer is larger than that factor. • if a factor is multiplied by a number between 0 and 1, the answer is smaller than that factor. • multiplication is extended from fractions to rational numbers by requiring that operations continue to satisfy the properties of operations, particularly the distributive property, leading to products such as $(-1)(-1) = 1$ and the rules for multiplying signed numbers. • integers can be divided, provided that the divisor is not zero.	• Why does one need rational numbers? • When does one use decimal forms versus fractional forms of rational numbers? • In what real world contexts would negative numbers be used?

Knowledge: Students will know…	Skills: Students will be able to…
• a number and its opposite have a sum of 0. • a number and its opposite are called additive inverses. • properties of operations. • absolute value represents distance on a number line, therefore it is always non-negative. • every quotient of integers (with non-zero divisor) is a rational number. • if p and q are integers, then $-(p/q) = (-p)/q = p/(-q)$. • the decimal form of a rational number terminates in 0s or eventually repeats.	• add rational numbers. • subtract rational numbers. • represent addition on a number line diagram. • represent subtraction on a number line diagram. • describe situations in which opposite quantities combine to make 0. • find the opposite of a number. • interpret sums of rational numbers by describing real-world contexts. • show that the distance between two rational numbers on the number line is the absolute value of their difference. • use absolute value in real-world contexts involving distances. • multiply divide rational numbers. • divide rational numbers. • interpret products of rational numbers by describing real-world contexts. • interpret quotients of rational numbers by describing real-world contexts. • convert a rational number to a decimal using long division. • solve real-world and mathematical problems involving the four operations with rational numbers.

RESOURCES

- Accentuate the Negative; Comparing and Scaling Investigation 3

Content Area:	MATHEMATICS	Grade Level:	7
Domain:	Expressions and Equations		
Cluster:	Use properties of operations to generate equivalent expressions.		

Common Core State Standards in Mathematics (CCSSM)

7.EE.1 Apply properties of operations as strategies to add, subtract, factor, and expand linear expressions with rational coefficients.

7.EE.2 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."*

Understandings: Students will understand…	Essential Questions
• only like terms can be combined, e.g., $x + y = x + y$ but $x + x = 2x$. • to factor an expression, one must factor out the greatest common factor. • rewriting an expression in different forms in a problem context can clarify the problem. • rewriting an expression can clarify how the quantities in the problem are related.	• Why would one need to find equivalent forms of an expression?
Knowledge: Students will know…	**Skills: Students will be able to…**
• how to add, subtract, multiply, and divide rational numbers. • $a(b + c) = ab + ac$. • how to find the greatest common factor of two or more terms.	• apply properties of operations as strategies to add and subtract linear expressions with rational coefficients. • apply properties of operations as strategies to factor linear expressions with rational coefficients. • apply properties of operations as strategies to expand linear expressions with rational coefficients.

RESOURCES

- Moving Straight Ahead

Content Area:	MATHEMATICS	Grade Level:	7
Domain:	Expressions and Equations		
Cluster:	Solve real-life and mathematical problems using numerical and algebraic expressions and equations.		

Common Core State Standards in Mathematics (CCSSM)

7.EE.3 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 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 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 3/4 inches long in the center of a door that is 27 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.*

7.EE.4 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. 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?*

b. 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.*

Understandings: Students will understand...	Essential Questions
• one form of a number may be more advantageous to use in a problem context than another form. • using estimation strategies helps to determine the reasonableness of answers. • finding one percent or ten percent of a number can facilitate solving percent problems. • why the inequality symbol reverses when multiplying or dividing both sides of an inequality by a negative number.	• What real world problems could be represented by equations? • What real world problems could be represented by inequalities?

Knowledge: Students will know...	Skills: Students will be able to...
• how to convert between fractions, decimals, and percents. • $10\% = 0.1 = \frac{1}{10}$. • since multiplying by 0.1 is the same as multiplying by $\frac{1}{10}$, the value of 10 percent can also be found by simply dividing by 10. • $1\% = 0.01 = \frac{1}{100}$. • since multiplying by 0.01 is the same as multiplying by $\frac{1}{100}$, the value of 1 percent can also be found by simply dividing by 100. • adding a percent of a number onto the original number is the same thing as adding that percent to 100 and then finding that new percent of the number, *e.g., The total cost of an item with 7% tax can be found in two ways: a) find 7% and add that to the original cost of the item; b) find 107% of the number.* • finding more than 100% of a number must yield an answer that is larger than the original number. • $p(x + q) = px + pq$, where p and q are specific rational numbers. • when multiplying or dividing both sides of an inequality by a negative number, every term must change signs and the inequality symbol reverses. • the graph of the solution set of a single variable inequality will be a ray on a number line. • in the graph of an inequality, the endpoint will be a closed circle indicating the number is included in the solution set ($\leq or \geq$) or an open circle indicating the number is not included in the solution set ($< or >$).	• solve multi-step real-life and mathematical problems posed with positive and negative rational numbers in any form (whole numbers, fractions, and decimals). • convert between different forms of a number. • assess the reasonableness of answers using mental computation and estimation strategies. • use variables to represent quantities in a real-world or mathematical problem. • construct simple equations ($px + q = r$ and $p(x + q) = r$) to solve problems by reasoning about the quantities. • construct simple inequalities ($px + q > r$ or $px + q < r$) to solve problems by reasoning about the quantities. • formulate mathematical equations (or inequalities) from words. • graph the solution set of an inequality. • interpret the solution set of an inequality in the context of a problem.

RESOURCES

- Variables and Patterns; Accentuate the Negative; Moving Straight Ahead

Content Area:	MATHEMATICS	Grade Level:	7
Domain:	Geometry		
Cluster:	Draw, construct, and describe geometrical figures and describe the relationships between them.		

Common Core State Standards in Mathematics (CCSSM)

7.G.1 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.

7.G.2 Draw (freehand, with ruler and protractor, and with technology) geometric shapes with given conditions. Focus on constructing triangles from three measures of angles or sides, noticing when the conditions determine a unique triangle, more than one triangle, or no triangle.

7.G.3 Describe the two-dimensional figures that result from slicing three-dimensional figures, as in plane sections of right rectangular prisms and right rectangular pyramids.

Understandings: Students will understand…	Essential Questions
• figures are similar only if -corresponding side lengths are proportional; -corresponding angles are congruent. • applying a scale factor less than one will shrink a figure. • applying a scale factors greater than one will enlarge a figure. • only certain combinations of angle and side measures will create triangles. • slicing a three-dimensional figure creates a two-dimensional cross section.	• How do certain professions utilize scale drawings?
Knowledge: Students will know…	**Skills: Students will be able to…**
• there is a proportional relationship between the corresponding sides of similar figures. • the corresponding angles of similar figures are congruent. • scale factor is the number that the side lengths of one figure can be multiplied by to give the corresponding side lengths of the other figure. • a proportion can be set up using the appropriate corresponding side lengths of two similar figures. • if a side length is unknown, a proportion can be solved to determine the measure of it. • the names and properties of two-dimensional shapes. • the names and properties of three-dimensional solids.	• solve problems involving scale drawings of geometric figures. • compute actual lengths from a scale drawing. • compute actual areas from a scale drawing. • reproduce a scale drawing at a different scale. • freehand, draw geometric shapes with given conditions. • using a ruler and protractor, draw geometric shapes with given conditions. • using technology, draw geometric shapes with given conditions. • construct triangles from three measures of angles or sides. • identify the conditions that determine a unique triangle, more than one triangle, or no triangle. • describe the two-dimensional figures that result from slicing three-dimensional figures, as in plane sections of right rectangular prisms and right rectangular pyramids.

RESOURCES

- Stretching and Shrinking; Comparing and Scaling Investigation 4; Filling and Wrapping

Content Area:	MATHEMATICS	Grade Level:	7
Domain:	Geometry		
Cluster:	Solve real-life and mathematical problems involving angle measure, area, surface area, and volume.		

Common Core State Standards in Mathematics (CCSSM)

7.G.4 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.

7.G.5 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.

7.G.6 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.

Understandings: Students will understand...	Essential Questions
• area is the number of square units needed to cover a two-dimensional figure. • circumference is the number of linear units needed to surround a circle. • the circumference of a circle is related to its diameter (and also its radius). • there is a relationship between the circumference and the area of a circle. • relationships between angles depends on where the angles are located. • a cube is a special case of a right rectangular prism. • volume is the number of cubic units needed to fill a three-dimensional space. • surface area is the number of square units needed to cover all faces of a three-dimensional figure. • area and volume are additive (small pieces can be found and added together to make the whole).	• When would one want to find area of a figure? • When would one want to find surface area of a figure? • When would one want to find volume of a figure? • How would changing the radius or diameter of a circle affect its circumference and area?
Knowledge: Students will know...	**Skills: Students will be able to...**
• $A=\pi r^2$ • $C=\pi d=2\pi r$ • supplementary angles are angles whose measures add to 180 degrees. • complementary angles are angles whose measures add to 90 degrees. • vertical angles are opposite angles formed when two lines intersect. • adjacent angles are non-overlapping angles which share a common vertex and side. • volume of a cube = s^3, where s equals the length of a side. • volume of a right prism = Bh, where B equals the area of the base and h equals the height of the prism. • an irregular two-dimensional figure can be broken apart into triangles, quadrilaterals, and other polygons whose areas are easy to find.	• use the formula for area of a circle to solve problems. • use the formula(s) for circumference of a circle to solve problems. • give an informal derivation of the relationship between the circumference and area of a circle. • use facts...? • write a simple equation to find an unknown angle. • solve a solve simple equations. • solve real-world and mathematical problems involving area of two-dimensional objects composed of triangles, quadrilaterals, and polygons. • solve real-world and mathematical problems involving volume and surface area of three-dimensional objects composed of cubes and right prisms.

RESOURCES

- Stretching and Shrinking Investigations 2 and 3; Filling and Wrapping

Content Area:	MATHEMATICS	Grade Level:	7
Domain:	Statistics and Probability		
Cluster:	Use random sampling to draw inferences about a population.		

Common Core State Standards in Mathematics (CCSSM)

7.SP.1. Understand that statistics can be used to gain information about a population by examining a sample of the population; generalizations about a population from a sample are valid only if the sample is representative of that population. Understand that random sampling tends to produce representative samples and support valid inferences.

7.SP.2. Use data from a random sample to draw inferences about a population with an unknown characteristic of interest. Generate multiple samples (or simulated samples) of the same size to gauge the variation in estimates or predictions. *For example, estimate the mean word length in a book by randomly sampling words from the book; predict the winner of a school election based on randomly sampled survey data. Gauge how far off the estimate or prediction might be.*

Understandings: Students will understand...	Essential Questions
• statistics can be used to gain information about a population by examining a sample of the populations. • generalizations about a population from a sample are valid only if the sample is representative of that population. • random sampling tends to produce representative samples and support valid inferences.	• What is the relationship between a sample and a population?
Knowledge: Students will know...	**Skills: Students will be able to...**
• A random sample can be found by various methods, including simulations or a random number generator (from a graphing calculator or table). • Samples should be the same size in order to compare the variation in estimates or predictions.	• use data from a random sample to raw inferences about a population with an unknown characteristic of interest. • generate multiple samples (or simulated samples) of the same size to gauge the variation in estimates or predictions. *For example, estimate the mean word length in a book by randomly sampling words from the book; predict the winner of a school election based on randomly sampled survey data. Gauge how far off the estimate or prediction might be.*

RESOURCES

Content Area:	MATHEMATICS	Grade Level:	7
Domain:	Statistics and Probability		
Cluster:	Draw informal comparative inferences about two populations.		

Common Core State Standards in Mathematics (CCSSM)

7.SP.3. Informally assess the degree of visual overlap of two numerical data distributions with similar variabilities, measuring the difference between the centers by expressing it as a multiple of a measure of variability. *For example, the mean height of players on the basketball team is 10 cm greater than the mean height of players on the soccer team, about twice the variability (mean absolute deviation) on either team; on a dot plot, the separation between the two distributions of heights is noticeable.*

7.SP.4. Use measures of center and measures of variability for numerical data from random samples to draw informal comparative inferences about two populations. *For example, decide whether the words in a chapter of a seventh-grade science book are generally longer than the words in a chapter of a fourth-grade science book.*

Understandings: Students will understand...	Essential Questions
• outliers skew data, which in turn affects the display. • measures of center give information about the location of mean, median and mode, whereas measures of variability give information about how spread out the data is.	• Why would one want to compare two populations? • What does the shape of data in a display tell one about the data?
Knowledge: Students will know...	**Skills: Students will be able to...**
• mean is the result if all of the data values are combined and then redistributed evenly among individuals so that each has the same amount. • mean is often called the average, and is the sum of the numerical values divided by the number of values. • median is the number that is the midpoint of an ordered set of numerical data. • when a distribution contains an even number of data values, the median is computed by finding the average of the two middle data values in on ordered list of the data values. • mode is the data value or category occurring with the greatest frequency (there can be no mode, one mode, or several modes). • mean absolute deviation of a data set is found by the following steps: 1) calculate the mean 2) determine the deviation of each variable from the mean 3) divide the sum of the absolute value of each deviation by the number of data points • range is a number found by subtracting the minimum value from the maximum value.	• informally assess the degree of visual overlap of two numerical data distributions with similar variabilities. • measure the difference between the centers by expressing it as a multiple of a measure of variability. • use measures of center for numerical data from random samples to draw informal comparative inferences about two populations. • use measures of variability for numerical data from random samples to draw informal comparative inferences about two populations.

RESOURCES

- Data Distributions

Content Area:	MATHEMATICS	Grade Level:	7
Domain:	Statistics and Probability		
Cluster:	Investigate chance processes and develop, use, and evaluate probability models.		

Common Core State Standards in Mathematics (CCSSM)

7.SP.5. 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.

7.SP.6. 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.*

7.SP.7. 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.

a. 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.*
b. 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?*

7.SP.8. Find probabilities of compound events using organized lists, tables, tree diagrams, and simulation.

a. 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.
b. 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.
c. 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?*

Understandings: Students will understand...	Essential Questions
• the probability of a chance event is a number between 0 and 1 that expresses the likelihood of the event occurring. • 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. • probability models can be used to find the probability of events.	• What real-life applications would involve finding the probability of an event? • What is the purpose of a simulation? • Why would one need to use a probability model?

Knowledge: Students will know…	Skills: Students will be able to…
• probability is equal to the ratio of favorable number of outcomes to total possible number of outcomes. • as a number for probability increases, so does the likelihood of the event occurring. • a probability near 0 indicates an unlikely event. • a probability around 1/2 indicates an event that is neither unlikely nor likely. • a probability near 1 indicates a likely event. • long-run relative frequencies allow one to approximate the probability of a chance event and vice versa. *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.* • a probability model is a visual display of the sample space and each corresponding probability. *For example, toss a die—the sample space is {1, 2, 3, 4, 5, 6} and the probability of each is 1/6. Therefore, the probability model is* *outcome 1 2 3 4 5 6* *probability 1/6 1/6 1/6 1/6 1/6 1/6* • a uniform probability model has equally likely probabilities. • discrepancies between a model and observed frequencies could occur for various reasons, including experimental error, recording error or simulations that were improperly designed. • a compound event consists of two or more simple events. • a sample space is a list of all possible outcomes of an experiment. • how to make an organized list. • how to create a tree diagram.	• approximate the probability of a chance event. • collect data on the chance process that produces an event. • observe an event's long-run relative frequency. • predict the approximate relative frequency of an event given the probability. • develop a probability model. • use a developed probability model to find probabilities of events. • compare probabilities from a model to observed frequencies. • if the agreement between the probability model and observed frequencies is not good, explain possible sources of the discrepancy. • develop a probability model (which may not be uniform) by observing frequencies in data generated from a chance process. • find probabilities of compound events using organized lists. • find probabilities of compound events using tables. • find probabilities of compound events using tree diagrams. • find probabilities of compound events using simulation. • 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. • design a simulation to generate frequencies for compound events. • use a designed simulation to generate frequencies for compound events.

RESOURCES

- What Do You Expect?