

K Math

Essential Questions

What do numbers represent and how do they help us to understand God's world?
How can simple math operations be used to explain God's creative powers?
How does measurement help us discover God's creative design?
How does learning about shapes and their parts help us appreciate God's creation?

Numbers and Operations



THE FOCUS OF THE STORY

What do numbers represent and how do they help us to understand God's world?

We begin by understanding that numbers represent an amount that helps us order and compare things in God's world. We learn the number names and how to count to tell the number of objects. We also learn how to compare numbers.

LEARNING TARGETS

- I can begin with any number and count up to 100 by ones and tens.
- I can count and write the numeral for a set of objects between 0 and 20.
- I can count to tell the number of objects up to 20.
- I can count out a set of objects when given a number from 1 to 20.
- I can compare two written numerals between 1 and 10.
- I can make numbers from 11 to 19 by telling how many tens and ones are in the number.
- I can take apart numbers from 11 to 19 by telling how many tens and ones are in the number.

CCSS

K.CC.1-7; K.NBT.1; K.OA.3,4

Operations and Algebraic Thinking



THE FOCUS OF THE STORY

How can simple math operations be used to explain God's creative powers?

Next, we discover that addition and subtraction help us to understand God's desire to create and recreate. We also learn that addition is putting together and adding to, and subtraction is taking apart and taking from.

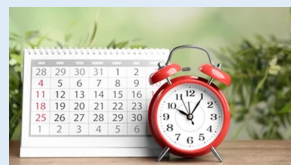
LEARNING TARGETS

- I can add numbers up to 10 by using objects or a drawing to show the problem.
- I can add numbers up to 5 without using objects or drawings.
- I can subtract numbers up to 10 by using objects or add to show the problem.
- I can subtract numbers up to 5 without using objects or drawings.

CCSS

K.OA.1,2; K.OA.5

Measurement and Data



THE FOCUS OF THE STORY

How does measurement help us discover God's creative design?

Next, we find out that measurement allows us to accurately describe the things that God has created. We learn how to describe and compare measurable attributes of objects. We also learn how to use a thermometer, clock, and calendar.

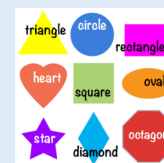
LEARNING TARGETS

- I can compare and describe a measurable attribute that two objects have in common.
- I can sort objects into categories and count the number of objects in each category.
- I can recognize hot and cold temperatures on a thermometer.
- I can place events in the order in which they happen.
- I can show that a clock is used to measure time.
- I can show that a calendar is used to measure time.

CCSS

K.MD.1,2

Geometry



THE FOCUS OF THE STORY

How does learning about shapes and their parts help us appreciate God's creation?

Lastly, we observe that shapes and their parts help us appreciate the beauty and order in everything God has designed. We learn how to identify and describe shapes. We also learn how to analyze, compare, create, and compose shapes.

LEARNING TARGETS

- I can compare two-dimensional shapes by their attributes.
- I can compare three-dimensional shapes by their attributes.
- I can join simple shapes to make larger shapes.

CCSS

K.G.1-6

Grade 1 Math

Essential Questions

What do numbers represent and how do they help us to understand God's world?
How can simple math operations be used to explain God's creative powers?
How does measurement help us discover God's creative design?
How does learning about shapes and their parts help us appreciate God's creation?

Numbers and Operations

Place Value		
Hundreds	Tens	Ones
9	2	8

THE FOCUS OF THE STORY

What do numbers represent and how do they help us to understand God's world?

We begin by understanding that numbers represent an amount that helps us order and compare things in God's world. We extend the counting sequence. We also learn about place value and properties of operations to add and subtract.

LEARNING TARGETS

- I can count to 120 starting from any number less than 120.
- I can count objects up to 120 and write the number to match.
- I can count by twos, fives, and twenty-fives up to 100.
- I can compare two two-digit numbers using < (less than), = (equal to), and > (greater than) by the amounts of tens and ones in each number.
- I can tell you 10 more and 10 less than any given two-digit number without counting up or down.
- I can add a two-digit number and a multiple of 10 up to 100.
- I can subtract multiples of 10 up to 90.

CCSS

1.NBT.1-6

Operations and Algebraic Thinking

$$2 + \square = 5$$

THE FOCUS OF THE STORY

How can simple math operations be used to explain God's creative powers?

Next, we discover that addition and subtraction help us to understand God's desire to create and recreate. We understand and apply properties of operations and the relationship between addition and subtraction. We also work with addition and subtraction equations within 20 to represent and solve problems.

LEARNING TARGETS

- I can use addition and subtraction strategies to solve word problems that equal 20 or less.
- I can add three numbers that equal 20 or less to solve a word problem.
- I can use strategies to add and subtract.
- I can use what I know about addition to help solve subtraction problems.
- I can fill in the missing number in an addition or subtraction problem.

CCSS

1.NBT.4; 1.OA.7,8

Measurement and Data



THE FOCUS OF THE STORY

How does measurement help us discover God's creative design?

Next, we find out that measurement allows us to accurately describe the things that God has created. We learn how to measure lengths with length units. We also learn how to tell and write time and tell the value of money. Finally, we begin to represent and interpret data.

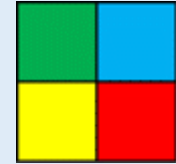
LEARNING TARGETS

- I can measure the length of an object using a smaller object.
- I can tell and write time to the hour and half hour on an analog clock.
- I can tell the value of different coins and a dollar bill.
- I can show up to 3 categories of data using a chart or graph and tell what the data means.

CCSS

1.MD.1-4

Geometry



THE FOCUS OF THE STORY

How does learning about shapes and their parts help us appreciate God's creation?

Lastly, we observe that shapes and their parts help us appreciate the beauty and order in everything God has designed. We learn how to reason with shapes and their attributes. We also learn how to divide shapes into equal parts.

LEARNING TARGETS

- I can build or draw shapes with particular attributes.
- I can use three-dimensional shapes to create new shapes.
- I can partition circles and rectangles into two and four equal parts and describe the parts.

CCSS

1.G.1-3

Grade 2 Math

Essential Questions

What do numbers represent and how do they help us to understand God's world?
 How can simple math operations be used to explain God's creative powers?
 How does measurement help us discover God's creative design?
 How does learning about shapes and their parts help us appreciate God's creation?

Numbers and Operations

$$\begin{array}{r} 32 \\ -15 \\ \hline ? \end{array}$$

regroup

$$\begin{array}{r} 212 \\ 32 \\ -15 \\ \hline 17 \end{array}$$

THE FOCUS OF THE STORY

What do numbers represent and how do they help us to understand God's world?

We begin by understanding that numbers represent an amount that helps us order and compare things in God's world. We understand place value. We then use place value understanding and properties of operations to add and subtract.

LEARNING TARGETS

- I can write numbers up to 1,000 using expanded form.
- I can start at any number and count by ones, fives, tens, and hundreds up to 1000.
- I can compare two three-digit numbers using $>$, $=$, and $<$ symbols.
- I can add or subtract 10 or 100 to a number between 100 and 900 in my head.
- I can use place value to add three-digit numbers within 1000 with regrouping.
- I can use place value to subtract three-digit numbers within 1000 with regrouping.

CCSS

2.NBT.1-4,7,8

Operations and Algebraic Thinking



THE FOCUS OF THE STORY

How can simple math operations be used to explain God's creative powers?

Next, we discover that addition and subtraction help us to understand God's desire to create and recreate. We represent and solve problems involving addition and subtraction within 100. We also work with equal groups of objects to gain foundations for multiplication.

LEARNING TARGETS

- I can add or subtract up to 100 to solve word problems.
- I can add up to 20 in my head.
- I can write an equation which shows adding the same two numbers will result in an even number.
- I can write an equation which shows the number of objects in a rectangular array.

CCSS

2.OA.1; 2.NBT.5,6

Measurement and Data



THE FOCUS OF THE STORY

How does measurement help us discover God's creative design?

Next, we find out that measurement allows us to accurately describe the things that God has created. We learn how to measure and estimate lengths in standard units and relate addition and subtraction to length. We also work with time and money. Finally, we represent and interpret data.

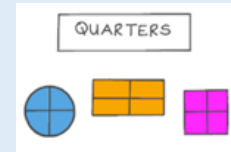
LEARNING TARGETS

- I can measure the length of things using inches, feet, centimeters, and meters.
- I can measure and find the difference between lengths of two objects using a standard unit of length.
- I can use addition and subtraction to solve word problems involving length of the same units up to 100.
- I can tell and write time using an analog clock to the nearest 5 minutes.
- I can solve word problems using dollars, quarters, dimes, nickels, and pennies.
- I can measure lengths of several objects to the nearest whole unit and show the data on a line plot.
- I can solve problems using information presented in a bar graph.

CCSS

2.MD.1-10

Geometry



THE FOCUS OF THE STORY

How does learning about shapes and their parts help us appreciate God's creation?

Lastly, we observe that shapes and their parts help us appreciate the beauty and order in everything God has designed. We also learn how to reason with shapes and their attributes.

LEARNING TARGETS

- I can draw shapes that have specific attributes.
- I can divide circles and rectangles into equal parts and describe the parts.

CCSS

2.G.1-3

Grade 3 Math

Essential Questions

What does numerical reasoning involve and what does it demonstrate about God's world?
How do mathematical operations connect us to an infinite God?
What do the systems of measurement reveal about God's creation?
What does geometry reveal about God?

Numbers and Operations



THE FOCUS OF THE STORY

What does numerical reasoning involve and what does it demonstrate about God's world?

We begin by understanding that numerical reasoning with whole numbers and fractions demonstrates dependability and order in God's world. We use place value understanding and properties of operations to perform multi-digit arithmetic. We also develop an understanding of fractions as numbers.

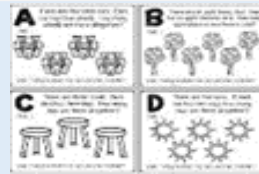
LEARNING TARGETS

- I can round whole numbers up to 1,000 to the nearest 10 and 100.
- I can add and subtract numbers up to 1,000 with and without regrouping.
- I can locate fractions on a number line.
- I can create equivalent fractions and tell why they are equivalent.
- I can write whole numbers as fractions.
- I can show how fractions compare using $>$, $=$, or $<$.

CCSS

3.NBT.1,2; 3.NF.1-3

Operations and Algebraic Thinking



THE FOCUS OF THE STORY

How do mathematical operations connect us to an infinite God? Next, we discover that solving problems through mathematical operations reveals to us numerical patterns that demonstrate God's unchanging order and consistency. We represent and solve problems involving multiplication and division within 100. We also understand properties of multiplication and the relationship between multiplication and division. Finally, we solve problems involving the four operations, and identify and explain patterns in arithmetic.

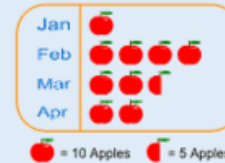
LEARNING TARGETS

- I can use multiplication and division to solve word problems.
- I can find the missing number in a multiplication or division equation.
- I can multiply one-digit whole numbers by 10.
- I can solve two-step word problems using addition, subtraction, multiplication, and division.
- I can use mental math and rounding to check if answers are reasonable.
- I can use properties of operations to multiply and divide.

CCSS

3.OA.1-9; 3.NBT.3

Measurement and Data



THE FOCUS OF THE STORY

What do the systems of measurement reveal about God's creation?

Next, we find out that accurately measuring and quantifying objects in God's creation demonstrates His dependability and precision. We learn to solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects. We also represent and interpret data.

LEARNING TARGETS

- I can add and subtract time intervals in word problems.
- I can solve word problems using mass or volume.
- I can read a calendar day, week, month, and year.
- I can measure temperature with Celsius and Fahrenheit thermometers.
- I can add and subtract money amount.
- I can draw and label a picture graph and a bar graph to show data.
- I can solve two-step problems using information from bar graphs.
- I can show measurement data in halves and fourths of an inch on a line plot.

CCSS

3.MD.1-4

Geometry



THE FOCUS OF THE STORY

What does geometry reveal about God?

Lastly, God is revealed as the Master Designer when we use geometry as a means of describing the attributes of the physical world. We learn how to reason with shapes and their attributes. We also understand concepts of area and relate area to multiplication and to addition. Finally, we recognize perimeter as an attribute of plane figures and distinguish between linear and area measures.

LEARNING TARGETS

- I can sort shapes into categories based on their attributes.
- I can divide shapes into parts with equal areas and describe those areas as fractions.
- I can find the area of a rectangle using multiplication.
- I can show the area of a rectangle using the distributive property.
- I can find the areas of figures by breaking them down into rectangles and adding the areas.
- I can find the missing side length of a polygon when I know the perimeter.
- I can make rectangles with the same area and different perimeters or rectangles with the same perimeter and different areas.

CCSS

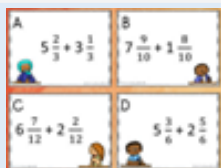
3.G.1,2; 3.MD.5-8

Grade 4 Math

Essential Questions

What does numerical reasoning involve and what does it demonstrate about God's world?
How do mathematical operations connect us to an infinite God?
What do the systems of measurement reveal about God's creation?
What does geometry reveal about God?

Numbers and Operations



THE FOCUS OF THE STORY

What does numerical reasoning involve and what does it demonstrate about God's world?

We begin by understanding that numerical reasoning with whole numbers and fractions demonstrates to us dependability and order in God's world. We apply place value understanding and properties of operations to multi-digit whole numbers. We extend our understanding of operations on whole numbers as well as our understanding of fraction equivalence and ordering to build fractions from unit fractions. Finally, we understand decimal notation for fractions, and compare decimal fractions.

LEARNING TARGETS

- I can compare two multi-digit numbers using $>$, $=$, and $<$.
- I can round multi-digit whole numbers to any place up to millions.
- I can add and subtract multi-digit whole numbers.
- I can multiply a whole number up to four digits by a one-digit number and two two-digit numbers.
- I can find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors.
- I can make equivalent fractions.
- I can compare two fractions with different numerators and denominators using $>$, $=$, and $<$.
- I can add and subtract mixed numbers with like denominators.
- I can solve word problems involving addition and subtraction of fractions with like denominators.
- I can solve word problems involving multiplication of a fraction by a whole number.
- I can add two fractions with denominators 10 and 100.
- I can compare two decimals to hundredths using $>$, $=$, and $<$.

CCSS

4.NBT.1-6; 4.NF.1-7

Operations and Algebraic Thinking



THE FOCUS OF THE STORY

How do mathematical operations connect us to an infinite God?

Next, we discover that solving problems through mathematical operations reveals numerical patterns that demonstrate God's unchanging order and consistency. We use the four operations with whole numbers to solve problems. We also gain familiarity with factors and multiples, and generate and analyze patterns.

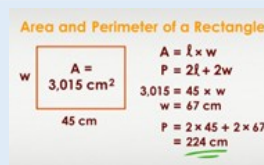
LEARNING TARGETS

- I can solve word problems by comparing two things through multiplication.
- I can solve multi-step word problems with whole numbers using the four operations.
- I can tell if a number is prime or composite.
- I can tell if a number is a multiple of a one-digit number.
- I can describe the features of a number pattern.
- I can describe the features of a shape pattern.

CCSS

4.OA.1-5

Measurement and Data



THE FOCUS OF THE STORY

What do the systems of measurement reveal about God's creation?

Next, we learn that accurately measuring and quantifying objects in God's creation demonstrates His dependability and precision. We solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit. We also represent and interpret data.

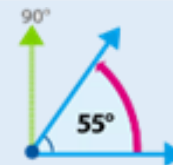
LEARNING TARGETS

- I can solve word problems involving measurement.
- I can find the area and perimeter of a rectangle.
- I can measure temperature with Celsius and Fahrenheit thermometers.
- I can count up to make change.
- I can solve addition and subtraction problems using a line plot of measurement data in fractions of a unit.

CCSS

4.MD.1-4

Geometry



THE FOCUS OF THE STORY

What does geometry reveal about God?

Lastly, God is revealed as the Master Designer when geometry is used as a means of describing the attributes of the physical world. We understand concepts of angle and measure angles. We also draw and identify lines and angles, and classify shapes by properties of their lines and angles.

LEARNING TARGETS

- I can draw angles with specific measurements.
- I can solve addition and subtraction problems to find unknown angles.
- I can draw points, lines, line segments, rays, angles, and perpendicular and parallel lines.
- I can draw all lines of symmetry in two-dimensional figures.
- I can group two-dimensional shapes based on whether the sides are parallel or perpendicular.
- I can group two-dimensional shapes based on whether they contain a right angle or not.

CCSS

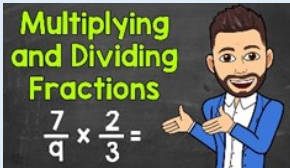
4.MD.5-7; 4.G.1-3

Grade 5 Math

Essential Questions

What does numerical reasoning involve and what does it demonstrate about God's world?
 How do mathematical operations connect us to an infinite God?
 What do the systems of measurement reveal about God's creation?
 What does geometry reveal about God?

Numbers and Operations



THE FOCUS OF THE STORY

What does numerical reasoning involve and what does it demonstrate about God's world?

We begin by understanding that numerical reasoning with whole numbers and fractions demonstrates to us dependability and order in God's world. We continue to focus on our understanding of the place value system. We perform operations with multi-digit whole numbers and with decimals to hundredths. We also use equivalent fractions as a strategy to add and subtract fractions. Finally, we apply and extend previous understandings of multiplication and division to multiply and divide fractions.

LEARNING TARGETS

- I can represent powers of 10 using whole number exponents.
- I can compare decimals to the thousandths using $>$, $=$, and $<$.
- I can round decimals to any place.
- I can divide whole numbers with up to four-digit dividends and two-digit divisors and explain the reasoning used.
- I can add, subtract, multiply, and divide decimals to hundredths and explain the reasoning used.
- I can solve word problems involving addition and subtraction of fractions with unlike denominators.
- I can solve word problems involving division of whole numbers with answers in fractions or mixed numbers.
- I can solve real-world problems involving multiplication of fractions and mixed numbers.
- I can solve real-world problems involving division of unit fractions by whole numbers and division of whole numbers by unit fractions.

CCSS

5.NBT.1-7; 5.NF.1-7

Operations and Algebraic Thinking



THE FOCUS OF THE STORY

How do mathematical operations connect us to an infinite God?

Next, we discover that solving problems through mathematical operations reveals numerical patterns that demonstrate God's unchanging order and consistency. We write and interpret numerical expressions. We also analyze patterns and relationships.

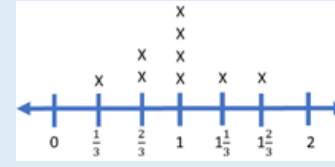
LEARNING TARGETS

- I can reduce fractions to lowest terms.
- I can interpret numerical expressions with parentheses, brackets, or braces.
- I can evaluate numerical expressions with parentheses, brackets, or braces.
- I can form ordered pairs using the relationship between two number patterns and graph them on a coordinate plane.

CCSS

5.OA.1-3

Measurement and Data



THE FOCUS OF THE STORY

What do the systems of measurement reveal about God's creation?

Next, we learn that accurately measuring and quantifying objects in God's creation demonstrates His dependability and precision. We convert like measurement units within a given measurement system. We also represent and interpret data.

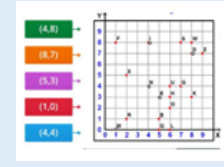
LEARNING TARGETS

- I can convert measurement units to solve word problems.
- I can find volumes of right rectangular prisms using the formula $V = l \times w \times h$.
- I can find volumes of solid figures made of two rectangular prisms by adding the volumes of the two parts.
- I can solve problems using a line plot with measurement data in fractions of a unit.
- I can find the mean, median, mode, and range of a set of data.

CCSS

5.MD.1,2

Geometry



THE FOCUS OF THE STORY

What does geometry reveal about God?

Lastly, God is revealed as the Master Designer when geometry is used as a means of describing the attributes of the physical world. We understand concepts of volume and relate volume to multiplication and to addition. We also graph points on the coordinate plane to solve real-world and mathematical problems. Finally, we classify two-dimensional figures into categories based on their properties.

LEARNING TARGETS

- I can find volumes of solid figures made of two rectangular prisms by adding the volumes of the two parts.
- I can solve problems using a line plot with measurement data in fractions of a unit.
- I can show and explain the relationship between the radius and diameter of a circle.
- I can graph points in the first quadrant of the coordinate plane.
- I can use a coordinate plane to solve problems.
- I can classify two-dimensional figures into categories based on their properties.

CCSS

5.MD.3-5; 5.G.1-4

Grade 6 Math

Essential Questions

How can we use God's gift of the number system to understand the world and all created things?
What do mathematical principles reveal about God's ordered universe?
How does the study of geometrical principles help us to better understand God's creation?
How can we collect and use information in a way that reflects God's orderly creation?

Ratios and Proportional Relationships

A simple ratio word problem

In a small business, 40 of the employees are men and 30 of the employees are women. What is ratio of men to women?

Ratio of men to women is
40 to 30, 40:30, or 40/30

THE FOCUS OF THE STORY

How can we use God's gift of the number system to understand the world and all created things?

We begin by understanding that the use of numerical and algebraic expressions helps us solve real-world and mathematical problems as well as understand God's creation. We focus on learning ratio concepts and using ratio reasoning to solve problems.

LEARNING TARGETS

- I can solve problems using ratios and unit rates.

CCSS

6.RP.1-3

The Number System

$$\begin{array}{r} 2 \overline{)748} \\ 8 \overline{)368} \\ 4 \overline{)1228} \end{array}$$

THE FOCUS OF THE STORY

How can we use God's gift of the number system to understand the world and all created things?

Next, we continue to develop our understanding that the use of numerical and algebraic expressions helps us solve real-world and mathematical problems as well as understand God's creation. We apply and extend previous understandings of multiplication and division to divide fractions by fractions. We also compute fluently with multi-digit numbers and find common factors and multiples. Finally, we apply and extend previous understandings of numbers to the system of rational numbers.

LEARNING TARGETS

- I can divide multi-digit numbers.
- I can divide multi-digit decimals.
- I can use the distributive property to show the sum of two whole numbers between one and 100 in different ways.
- I can use positive and negative numbers to describe quantities.
- I can write, interpret, and explain statements of order for rational numbers.
- I can interpret absolute value as it applies to real-world situations.
- I can graph points in all four quadrants of the coordinate plane to solve problems.
- I can calculate the distance between points that share a coordinate.
- I can solve word problems involving the division of fractions by fractions.

CCSS

6.NS.1-8

Expressions and Equations

$$\begin{array}{c} \text{arc over } 7(8+1) \\ 7(8+1) \\ 7(8) + 7(1) \end{array}$$

THE FOCUS OF THE STORY

What do mathematical principles reveal about God's ordered universe?

Next, we learn that the consistency of mathematical order of operations and principles demonstrates the orderliness and precision of God's creation and universe. We apply and extend previous understandings of arithmetic to algebraic expressions. We also reason about and solve one-variable equations and inequalities. Finally, we represent and analyze quantitative relationships between dependent and independent variables.

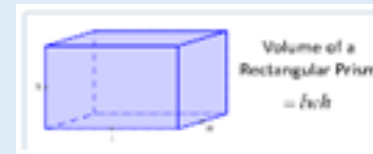
LEARNING TARGETS

- I can evaluate numerical expressions with whole-number exponents.
- I can evaluate expressions when given the specific value of a variable.
- I can create equivalent expressions using the properties of operations.
- I can solve problems by writing and solving equations of the form $x + p = q$ and $px = q$.
- I can write an inequality of the form $x > c$ or $x < c$ to represent a problem.
- I can use graphs and tables to show the relationship between dependent and independent variables.

CCSS

6.EE.1-9

Geometry



THE FOCUS OF THE STORY

How does the study of geometrical principles help us to better understand God's creation?

Next, we learn that the complexity of God's creation is revealed in the attributes and relationships of geometric objects and principles when applied to the real world. We solve real-world and mathematical problems involving area, surface area, and volume.

LEARNING TARGETS

- I can find the area of a polygon by decomposing the shape into rectangles and triangles.
- I can find the volume of a right rectangular prism by applying the appropriate formula.
- I can use coordinates to find the length of a side of a polygon with the same first coordinate or the same second coordinate.
- I can find the surface area of a three-dimensional figure with the use of a net.

CCSS

6.G.1-4

Statistics and Probability



THE FOCUS OF THE STORY

How can we collect and use information in a way that reflects God's orderly creation?

Lastly, we grow in our understanding that information from God's vast creation can be measured, recorded, and displayed to assist in understanding and decision making. We develop understanding of statistical variability. We also summarize and describe distributions.

LEARNING TARGETS

- I can calculate elapsed time.
- I can describe the distribution of a set of data by center, spread, and overall shape.
- I can choose appropriate measures of center and variability to describe a data set gathered to answer a statistical question.

CCSS

6.SP.1-5

Grade 7 Math

Essential Questions

How can we use God's gift of the number system to understand the world and all created things?
What do mathematical principles reveal about God's ordered universe?
How does the study of geometrical principles help us to better understand God's creation?
How can we collect and use information in a way that reflects God's orderly creation?

Ratios and Proportional Relationships



THE FOCUS OF THE STORY

How can we use God's gift of the number system to understand the world and all created things?

We begin by understanding that the use of numerical and algebraic expressions helps us solve real-world and mathematical problems as well as understand God's creation. We analyze proportional relationships and use them to solve real-world and mathematical problems.

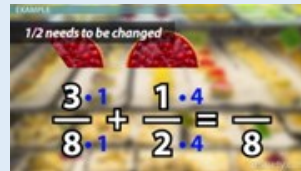
LEARNING TARGETS

- I can compute unit rates associated with ratios of fractions.
- I can write equations for proportional relationships to solve multi-step ratio and percent problems.

CCSS

7.RP.1-3

The Number System



THE FOCUS OF THE STORY

How can we use God's gift of the number system to understand the world and all created things?

Next, we continue to develop our understanding that the use of numerical and algebraic expressions helps us solve real-world and mathematical problems as well as understand God's creation. We apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.

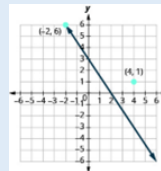
LEARNING TARGETS

- I can use properties of operations to add and subtract rational numbers.
- I can add and subtract rational numbers to solve real-world problems.
- I can use properties of operations to multiply and divide rational numbers.
- I can multiply and divide rational numbers to solve real-world problems.
- I can solve problems using scientific notation.
- I can solve problems using exponents.
- I can solve problems using square roots.

CCSS

7.NS.1-3

Expressions and Equations



THE FOCUS OF THE STORY

What do mathematical principles reveal about God's ordered universe?

Next, we learn that the consistency of mathematical order of operations and principles demonstrates the orderliness and precision of God's creation and universe. We use properties of operations to generate equivalent expressions. We also solve real-life and mathematical problems using numerical and algebraic expressions and equations.

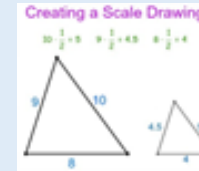
LEARNING TARGETS

- I can use properties of operations to add, subtract, factor, and expand linear expressions with rational coefficients.
- I can rewrite expressions in different forms in a problem context.
- I can solve problems using positive and negative rational numbers in any form.
- I can solve word problems leading to equations of the form $px + q = r$ and $p(x + q) = r$.
- I can solve word problems leading to inequalities in the form $px + q > r$ or $ps + q < r$.
- I can graph the ordered pairs of a linear equation with two variables.
- I can graph the solution set of an inequality on a number line.
- I can convert measures to solve multi-step word problems.

CCSS

7.EE.1-4

Geometry



THE FOCUS OF THE STORY

How does the study of geometrical principles help us to better understand God's creation?

Next, we learn that the complexity of God's creation is revealed in the attributes and relationships of geometric objects and principles when applied to the real world. We draw, construct, and describe geometrical figures and describe the relationships between them. We also solve real-life and mathematical problems involving angle measure, area, surface area, and volume.

LEARNING TARGETS

- I can create a scale drawing at a different scale.
- I can draw triangles when given three angles or side measures.
- I can name the two-dimensional figures to represent a particular slice of a three-dimensional figure.
- I can use formulas for the area and circumference of a circle to solve problems.
- I can write and solve equations for an unknown angle in a figure.
- I can solve problems using the area formula for two-dimensional figures.
- I can solve problems using the volume formula for cubes and right prisms.
- I can solve problems using the surface area formula for three-dimensional figures.

CCSS

7.G.1-6

Statistics and Probability



THE FOCUS OF THE STORY

How can we collect and use information in a way that reflects God's orderly creation?

Lastly, we grow in our understanding that information from God's vast creation can be measured, recorded, and displayed to assist in understanding and decision making. We use random sampling to draw inferences about a population. We also draw informal comparative inferences about two populations. Finally, we investigate chance processes and develop, use, and evaluate probability models.

LEARNING TARGETS

- I can draw inferences about a population from a random sample.
- I can determine the accuracy of inferences about a population by comparing multiple samples.
- I can use measures of center and variability from random samples to make inferences about two populations.
- I can develop a uniform probability model and use it to find probabilities of events.
- I can develop a probability model from observed experiments.
- I can design and use simulation to predict the probability of a compound event.

CCSS

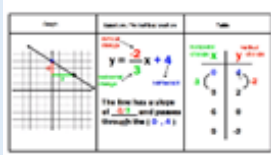
7.SP.1-8

Grade 8 Math

Essential Questions

How can we use God's gift of the number system to understand the world and all created things?
What do mathematical principles reveal about God's ordered universe?
How does the study of geometrical principles help us to better understand God's creation?
How can we collect and use information in a way that reflects God's orderly creation?

Ratios and Proportional Relationships



THE FOCUS OF THE STORY

How can we use God's gift of the number system to understand the world and all created things?

We begin by understanding that the use of numerical and algebraic expressions helps us solve real-world and mathematical problems as well as understand God's creation. We define, evaluate, and compare functions. We also use functions to model relationships between quantities.

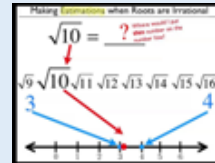
LEARNING TARGETS

- I can compare the properties of two functions that are represented differently.
- I can determine and interpret the rate of change and initial value of a function.
- I can describe the functional relationship between two quantities by analyzing a graph.

CCSS

8.F.1-5

The Number System



THE FOCUS OF THE STORY

How can we use God's gift of the number system to understand the world and all created things?

Next, we continue to develop our understanding that the use of numerical and algebraic expressions helps us solve real-world and mathematical problems as well as understand God's creation. We learn that there are numbers that are not rational, and approximate them by rational numbers.

LEARNING TARGETS

- I can use rational approximations of irrational numbers to compare the size of irrational numbers.

CCSS

8.NS.1,2

Expressions and Equations

Scientific Notation

2.5×10^5
Coefficient Exponent

THE FOCUS OF THE STORY

What do mathematical principles reveal about God's ordered universe?

Next, we learn that the consistency of mathematical order of operations and principles demonstrates the orderliness and precision of God's creation and universe. We work with radicals and integer exponents. We also understand the connections between proportional relationships, lines, and linear equations. Finally, we analyze and solve linear equations and pairs of simultaneous linear equations.

LEARNING TARGETS

- I can evaluate the square root of a perfect square and the cube root of a perfect cube.
- I can use single-digit numbers times integer powers of 10 to estimate large or small quantities.
- I can solve problems with numbers expressed in scientific and decimal notation.
- I can use similar triangles to explain why the slope m is the same between two points on a non-vertical line in a coordinate plane.
- I can explain the equations $y = mx$ and $y = mx + b$.
- I can solve linear equations in one variable with rational number coefficients.
- I can solve pairs of simultaneous linear equations in two variables.
- I can solve problems leading to two linear equations in two variables.

CCSS

8.EE.1-8

Geometry



THE FOCUS OF THE STORY

How does the study of geometrical principles help us to better understand God's creation?

Next, we learn that the complexity of God's creation is revealed in the attributes and relationships of geometric objects and principles when applied to the real world. We understand congruence and similarity using physical models, transparencies, or geometry software. We also understand and apply the Pythagorean Theorem. Finally, we solve real-world and mathematical problems involving volume of cylinders, cones, and spheres.

LEARNING TARGETS

- I can describe the effect of dilations, translations, rotations, and reflections on two-dimensional figures using coordinates.
- I can describe a sequence of transformations to show that two figures are similar.
- I can informally prove facts about angles.
- I can apply the Pythagorean Theorem to find an unknown side length of a right triangle.
- I can apply the Pythagorean Theorem to find the distance between two points in a coordinate system.
- I can solve problems involving the volumes of cones, cylinders, and spheres.

CCSS

8.G.1-9

Statistics and Probability

	Sport Utility Vehicle (SUV)	Sports Car	Totals
male	21	39	60
female	135	45	180
Totals	156	84	240

Column Totals Row Totals

THE FOCUS OF THE STORY

How can we collect and use information in a way that reflects God's orderly creation?

Lastly, we grow in our understanding that information from God's vast creation can be measured, recorded, and displayed to assist in understanding and decision making. We investigate patterns of association in bivariate data.

LEARNING TARGETS

- I can use the equation of a linear model of bivariate measurement data to solve problems.
- I can construct and interpret a two-way table that summarizes bivariate categorical data.

CCSS

8.SP.1-4