CCS COURSE MAP
SUBJECT: MATH

GRADE LEVEL 4ᵗʰ GRADE

COURSE LENGTH   YEAR   **REVIEWED 2018-2019**

Student Goals:

I	To appreciate the order that God has put in the world around us and learn the processes for applying and calculating this order.
II	To establish understanding in the importance of mathematical knowledge.

Student Outcomes:

I	The students will be able to develop an appreciation of how God is concerned about numbers.
II	The students will be able to understand mathematical concepts in everyday uses.
III	The students will be able to grow from fact to concept and from concept to principle.

The following Biblical concepts are integrated throughout the CCS Math curriculum:

- We can learn more about God by studying Math.
- God is a God of order.
- God is faithful (as seen in patterns and seasons).
- God is the reason Math works.
- Being able to use Math skills and concepts well will help students be efficient, influential workers in God's Kingdom. Almost every vocation needs knowledge of Math.
- We bear the image of God, so we are able to be creative. Part of being creative involves knowledge of Math.
- By using Math concepts, knowing about the world around us and how it works can help us be better stewards of this world. Humans are commanded to take care of God's creation.
- The ways we apply our Math concepts can either promote the evil and darkness in our world or help redeem the areas affected by sin. For example, we can use knowledge of Math to build better medical equipment to help people suffering from sickness and disease.
- Even though we can learn a lot about Math and from Math, we need to recognize that Math is not the absolute truth in our world – God is. He's the one who created Math, so He controls it.
- The goal of teaching Math from a Biblical perspective is not to necessarily do it differently, but to do it faithfully and obediently.

UNIT/ WEEKS	STANDARD	OBJECTIVES	ACTIVITIES/ASSESSMENT	RESOURCES	BIBLICAL INTEGRATION

CCS COURSE MAP
SUBJECT: MATH

GRADE LEVEL 4th GRADE
COURSE LENGTH   YEAR   **REVIEWED 2018-2019**

| Topic 1

Numeration

2 Weeks | MN Math Standards

4.1.1.2

4.1.1.5 | Students will:
• represent numbers with place-value blocks and number lines
• write numbers in standard, expanded, and word form
• represent numbers in the millions using a place-value chart
• write numbers in expanded form, using periods to help write numbers in word form
• apply their knowledge of place value to compare and order numbers
• show how to use place value to round whole numbers
• use place-value charts to read, write, and compare decimals in tenths | • Complete related whole group and small group activities
• Classroom and small group discussions
• Complete textbook assignments
• Complete supplemental worksheets
• Timed Tests
• Occasional games
• Play review game
• Topic Test | • *Envision Math 4* Teacher Edition
• *Envision Math 4* Student Textbook
• Various Teacher Resources
• Various Math Games | • Numbers are well organized with place values and periods. We know that God is also organized and a God of order. |

		and hundredths using money • convert a collection of coins and bills into a total amount and make change			
Topic 2 Adding and Subtracting Whole Numbers 2 Weeks	MN Math Standards 4.1.1.5	Students will: • apply a variety of methods to add and subtract whole numbers mentally • round whole numbers to estimate sums and differences • add numbers to hundred thousands with and without regrouping • subtract numbers to thousands with and without regrouping • subtract numbers with zeros to thousands	• Complete related whole group and small group activities • Classroom and small group discussions • Complete textbook assignments • Complete supplemental worksheets • Timed Tests • Occasional games • Play review game • Topic Test	• *Envision Math 4* Teacher Edition • *Envision Math 4* Student Textbook • Various Teacher Resources • Various Math Games	• We want students to treat others as we would like to be treated. Therefore, students can use knowledge of adding and subtracting to share fairly with their friends.

CCS COURSE MAP
SUBJECT: MATH

GRADE LEVEL 4ᵗʰ GRADE
COURSE LENGTH   YEAR   **REVIEWED 2018-2019**

	MN Math Standards	Students will:	• Complete related whole group and small group activities	• *Envision Math 4* Teacher Edition	• We can see God's systematic character in the multiplication tables and other formulas
Topic 3		• recognize multiplication as repeated addition of equal groups used in arrays and comparisons	• Classroom and small group discussions	• *Envision Math 4* Student Textbook	
Multiplication Meanings and Facts	4.1.1.1		• Complete textbook assignments	• Various Teacher Resources	
	4.1.1.2		• Complete supplemental worksheets	• Various Math Games	
2 Weeks	4.1.1.5	• use patterns to find products with factors of 2, 5, and 9	• Timed Tests		
			• Occasional games		
		• use multiplication properties to simplify computations	• Play review game		
			• Topic Test		
		• use the Distributive Property to simplify multiplication problems by rewriting one of the factors as a sum of two numbers			
		• use the Distributive Property and other regrouping properties to simplify			

GRADE LEVEL 4ᵗʰ GRADE
COURSE LENGTH   YEAR   **REVIEWED 2018-2019**

		multiplication involving 6s, 7s, and 8s by rewriting one of the factors • use patterns as aids to mastery of facts and multiples of 10, 11, and 12			
Topic 4 Division Meanings and Facts 1 Week	MN Math Standards 4.1.1.1 4.1.1.5 4.1.1.6	Students will: • use and draw models to solve division problems • use arrays to write and complete multiplication and division fact families • use multiplication facts with 0 and 1 to learn about special division rules with 0 and 1 • identify multiplication facts related to division facts in order to solve division	• Complete related whole group and small group activities • Classroom and small group discussions • Complete textbook assignments • Complete supplemental worksheets • Timed Tests • Occasional games • Play review game • Topic Test	• *Envision Math 4* Teacher Edition • *Envision Math 4* Student Textbook • Various Teacher Resources • Various Math Games	• We can talk about how Division is related to Multiplication and to Subtraction. This shows us that everything is connected. God created everything in a systematic way. He did not create one area and then another separate one. Rather, He had a plan and made connections between Mathematical ideas.

CCS COURSE MAP
SUBJECT: MATH

GRADE LEVEL 4ᵗʰ GRADE
COURSE LENGTH   YEAR

REVIEWED 2018-2019

		problems			
Topic 5 Multiplying by 1-Digit Numbers 2 Weeks	MN Math Standards 4.1.1.1 4.1.1.2 4.1.1.3 4.1.1.4 4.1.1.5	Students will: • use basic multiplication facts and number patterns to multiply by multiples of 10 and 100 • use compatible numbers with adjustment, breaking apart, and other strategies to multiply numbers mentally • use compatible numbers and rounding to estimate solutions to multiplication	• Complete related whole group and small group activities • Classroom and small group discussions • Complete textbook assignments • Complete supplemental worksheets • Timed Tests • Occasional games • Play review game • Topic Test	• *Envision Math 4* Teacher Edition • *Envision Math 4* Student Textbook • Various Teacher Resources • Various Math Games	• We can see God's systematic character in the multiplication tables and other formulas

		problems • record multiplication using an expanded algorithm • multiply 2-digit numbers by 1-digit numbers using paper and pencil methods • use the standard algorithm to multiply 3-digit by 1-digit numbers • solve problems using the problem solving strategy draw a picture and write an equation			

CCS COURSE MAP
SUBJECT: MATH

GRADE LEVEL 4th GRADE
COURSE LENGTH   YEAR   **REVIEWED 2018-2019**

Topic 6 Patterns and Expressions 1 Week	MN Math Standards 4.1.1.5 4.2.1.1 4.2.2.1 4.2.2.2	Students will: • recognize understand how to work with variables in a table • study completed tables to determine a rule and write an expression • solve problems by using objects to show the action	• Complete related whole group and small group activities • Classroom and small group discussions • Complete textbook assignments • Complete supplemental worksheets • Timed Tests • Occasional games • Play review game • Topic Test	• *Envision Math 4* Teacher Edition • *Envision Math 4* Student Textbook • Various Teacher Resources • Various Math Games	• We know that God has created this world with order and there are patterns and rules that we can see and use in creation. This is important when studying Math – we can understand more about God's creation.
Topic 7 Multiplying by 2-Digit Numbers 2 Weeks	MN Math Standards 4.1.1.1 4.1.1.2 4.1.1.3 4.1.1.4 4.1.1.5	Students will: • discover and understand patterns used to multiply by 10 and 100 • use rounding and compatible numbers to estimate solutions to multiplication problems • use arrays and expanded algorithms to multiply two-digit numbers by two-digit numbers to find the product	• Complete related whole group and small group activities • Classroom and small group discussions • Complete textbook assignments • Complete supplemental worksheets • Timed Tests • Occasional games • Play review game • Topic Test	• *Envision Math 4* Teacher Edition • *Envision Math 4* Student Textbook • Various Teacher Resources • Various Math Games	• We can keep using what we have already learned to learn how to multiply by 2-digit numbers. This shows how integrated Math is. Everything builds on each other. God created it so we can learn it in a step by step manner. This shows us more about our Creator's order.

GRADE LEVEL 4ᵗʰ GRADE
COURSE LENGTH   YEAR   **REVIEWED 2018-2019**

		• use grids and patterns to multiply 2-digit numbers and multiples of 10 • use partial products to multiply two-digit numbers by 2-digit numbers and find the products • learn to multiply greater numbers • solve two-question problems			
Topic 8 Dividing by 1-Digit Divisors 2 Weeks	MN Math Standards 4.1.1.1 4.1.1.2 4.1.1.4 4.1.1.5 4.1.1.6	Students will: • use basic facts and patterns of zeros to solve division problems with 3-digit dividend and 1-digit divisors • use compatible numbers and rounding to estimate quotients • divide whole numbers by 1-digit divisors resulting	• Complete related whole group and small group activities • Classroom and small group discussions • Complete textbook assignments • Complete supplemental worksheets • Timed Tests • Occasional games • Play review game • Topic Test	• *Envision Math 4* Teacher Edition • *Envision Math 4* Student Textbook • Various Teacher Resources • Various Math Games	• We can see there are a few different strategies to use when dividing. There are different steps to follow in order to get the correct answer. This shows us the complexity of God.

CCS COURSE MAP
SUBJECT: MATH

GRADE LEVEL 4ᵗʰ GRADE
COURSE LENGTH   YEAR   **REVIEWED 2018-2019**

		in quotients with remainders • use place value to understand the algorithm of long division • use the standard algorithm to divide two-digit numbers by a one-digit number • use the standard algorithm to divide 3-digit numbers by 1-digit numbers • use the standard algorithm to divide 3-digit numbers by 1-digit numbers and properly decide where to begin dividing • learn how to factor whole numbers • learn to identify prime and composite numbers • identify the hidden question in a multistep problem			

CCS COURSE MAP
SUBJECT: MATH

GRADE LEVEL 4th GRADE
COURSE LENGTH   YEAR   **REVIEWED 2018-2019**

	MN Math Standards	Students will:			
Topic 9 Lines, Angles, and Shapes 1 Week	4.3.1.1 4.3.1.2 4.3.2.1 4.3.2.2	• identify and describe points, lines, and planes • learn geometric terms to describe parts of lines and types of angles • be able to measure and draw angles • learn to identify polygons • learn to identify and classify triangles • learn to identify quadrilaterals • solve problems by making and testing generalizations	• Complete related whole group and small group activities • Classroom and small group discussions • Complete textbook assignments • Complete supplemental worksheets • Timed Tests • Occasional games • Play review game • Topic Test	• *Envision Math 4* Teacher Edition • *Envision Math 4* Student Textbook • Various Teacher Resources • Various Math Games	• Creation is full of lines, angles, and shapes; studying these things shows us more about creation; we are able to better take care of creation when we understand it better • Classifying and sorting shapes into categories gives order to our lives, which shows that God is a God of order.

CCS COURSE MAP
SUBJECT: MATH

GRADE LEVEL 4ᵗʰ GRADE
COURSE LENGTH   YEAR   **REVIEWED 2018-2019**

	MN State Standards	Students will:	• Complete related whole group and small group activities	• *Envision Math 4* Teacher Edition	• Knowledge of fractions can help us in so many different areas of life. So learning fractions creates efficient Kingdom workers.
Topic 10

Understanding Fractions

3 Weeks | 4.1.2.1

4.1.2.2

4.1.2.3

4.1.2.4 | • identify and draw fractional parts of a region and a set, and divide sets to show fractional parts
• describe and compare fractional parts of whole objects and sets
• estimate fractional parts of regions and sets
• use models and objects to show equivalent fractions
• express equivalent fractions in simplest form
• identify and write mixed numbers as improper fractions and improper fractions as mixed numbers
• use benchmark fractions to compare fractions with unlike | • Classroom and small group discussions
• Complete textbook assignments
• Complete supplemental worksheets
• Timed Tests
• Occasional games
• Play review game
• Topic Test | • *Envision Math 4* Student Textbook
• Various Teacher Resources
• Various Math Games | • We can also learn about fairness when dealing with fractions. Talk about sharing equally with those in need. |

GRADE LEVEL 4ᵗʰ GRADE
COURSE LENGTH   YEAR   **REVIEWED 2018-2019**

		denominators • use common denominators and equivalent fractions to order fractions with unlike denominators • write to explain whether an answer is correct or not			
Topic 11 Adding and Subtracting Fractions 1 Week	MN Math Standards 4.1.2.1 4.1.2.2 4.1.2.3 4.1.2.4	Students will: • add and subtract fractions with like denominators using models and paper and pencil • add fractions with unlike denominators using models and paper and pencil • understand how to subtract fractions with unlike denominators • draw a picture and write an equation to solve a problem	• Complete related whole group and small group activities • Classroom and small group discussions • Complete textbook assignments • Complete supplemental worksheets • Timed Tests • Occasional games • Play review game • Topic Test	• *Envision Math 4* Teacher Edition • *Envision Math 4* Student Textbook • Various Teacher Resources • Various Math Games	• Knowledge of fractions can help us in so many different areas of life. So learning fractions creates efficient Kingdom workers. • We can also learn about fairness when dealing with fractions. Talk about sharing equally with those in need.

CCS COURSE MAP
SUBJECT: MATH

GRADE LEVEL 4ᵗʰ GRADE
COURSE LENGTH   YEAR   **REVIEWED 2018-2019**

Topic 12 Understanding Decimals 2 Weeks	MN Math Standards 4.1.2.5 4.1.2.6 4.1.2.7	Students will: • use models and place-value charts to represent decimals to hundredths • read and write decimals in expanded, standard, and word form • use models and place-value charts to compare decimals to hundredths • understand how to write fractions as decimals and	• Complete related whole group and small group activities • Classroom and small group discussions • Complete textbook assignments • Complete supplemental worksheets • Timed Tests • Occasional games • Play review game • Topic Test	• *Envision Math 4* Teacher Edition • *Envision Math 4* Student Textbook • Various Teacher Resources • Various Math Games	• Learning about decimals shows that even the smallest parts matter; even the smallest parts can make a difference; we care about the smallest parts. The same should be true about how we view the people and things around us; we should care about the details and things that may seem insignificant. • This also shows that God cares about details and small parts that He even created them.

GRADE LEVEL 4ᵗʰ GRADE
COURSE LENGTH   YEAR   **REVIEWED 2018-2019**

		decimals as fractions • learn to locate and name fractions and decimals on a number line • understand how to graph decimals and mixed numbers on the number line • solve problems using the strategy draw a picture			
Topic 13 Operations with Decimals 2 Weeks	MN Math Standards 4.1.2.5 4.1.2.6 4.1.2.7	Students will: • round two-place decimal numbers to one place or the nearest whole number • round decimal numbers to estimate sums and differences • add and subtract decimals in tenths and hundredths using models • estimate and compute the sum or difference of	• Complete related whole group and small group activities • Classroom and small group discussions • Complete textbook assignments • Complete supplemental worksheets • Timed Tests • Occasional games • Play review game • Topic Test	• *Envision Math 4* Teacher Edition • *Envision Math 4* Student Textbook • Various Teacher Resources • Various Math Games	• Learning about decimals shows that even the smallest parts matter; even the smallest parts can make a difference; we care about the smallest parts. The same should be true about how we view the people and things around us; we should care about the details and things that may seem insignificant. • This also shows that God cares about

GRADE LEVEL 4th GRADE
COURSE LENGTH   YEAR   **REVIEWED 2018-2019**

		whole numbers and positive decimals to two places • multiply a decimal number by a whole number • divide a decimal number by a whole number • try a solution, check the solution, and if not correct, revise the solution			details and small parts that He even created them.
Topic 14 Area and Perimeter 2 Weeks	MN Math Standards 4.3.2.3 4.3.2.4	Students will: • measure the area of a figure by counting the number of square units that cover a region • find the area of rectangles by counting square units or by using a formula • find the area of irregular shapes • use the formula for	• Complete related whole group and small group activities • Classroom and small group discussions • Complete textbook assignments • Complete supplemental worksheets • Timed Tests • Occasional games • Play review game • Topic Test	• *Envision Math 4* Teacher Edition • *Envision Math 4* Student Textbook • Various Teacher Resources • Various Math Games	• Understanding area and perimeter can help us be responsible with the materials we use. God has given us materials, and we need to use them wisely. Knowledge of just how much we need can prevent waste.

GRADE LEVEL 4ᵗʰ GRADE
COURSE LENGTH   YEAR   **REVIEWED 2018-2019**

		the area of a rectangle in order to find a formula for the area of a parallelogram • use the relationship between triangles and parallelograms to find the area of triangles • find the perimeter of a polygon by adding the lengths of the sides of by using the formula • break a problem into smaller, more manageable pieces and find a pattern to fit			

CCS COURSE MAP
SUBJECT: MATH

GRADE LEVEL 4ᵗʰ GRADE
COURSE LENGTH   YEAR   **REVIEWED 2018-2019**

	MN State Standards	Students will:			
Topic 15 Solids 2 Weeks	4.3.1.1 4.3.1.2	• learn to describe and classify solids • use a two-dimensional shape to represent a three-dimensional object • interpret views of solids as seen from different perspectives • measure the volume of a solid either by counting cubic units or by using a formula • recognize patterns and be able to continue a pattern	• Complete related whole group and small group activities • Classroom and small group discussions • Complete textbook assignments • Complete supplemental worksheets • Timed Tests • Occasional games • Play review game • Topic Test	• *Envision Math 4* Teacher Edition • *Envision Math 4* Student Textbook • Various Teacher Resources • Various Math Games	• Being able to classify and sort solids shows that there is organization in our world, and that God created our world orderly. • We can also think about looking at solids from different perspectives. Think about how different the solid looks from different perspectives. Think about this, then, with events in our lives. Often, we only see one perspective. God is able to see every perspective, and He is in control of the whole situation.

CCS COURSE MAP
SUBJECT: MATH

GRADE LEVEL 4ᵗʰ GRADE
COURSE LENGTH   YEAR   **REVIEWED 2018-2019**

	MN State Standards	Students will:			
Topic 16

Measurement, Time, and Temperature

3 Weeks | 3.3.3.2

3.3.3.4 | • estimate and measure length by choosing the most appropriate unit of length
• estimate fluently with customary capacity units
• compare the relative sizes of capacity measurements
• estimate fluently and measure with units of weight
• be able to convert between customary units
• estimate and measure length to the nearest centimeter, and choose the most appropriate metric unit for measuring length
• estimate fluently with milliliters and liters
• measure capacity | • Complete related whole group and small group activities
• Classroom and small group discussions
• Complete textbook assignments
• Complete supplemental worksheets
• Timed Tests
• Occasional games
• Play review game
• Topic Test | • *Envision Math 4* Teacher Edition
• *Envision Math 4* Student Textbook
• Various Teacher Resources
• Various Math Games | • God called people in the Bible to take accurate measurements.
• Knowing how to take accurate measurements will make us more efficient in the work we may be called to in God's Kingdom.
• We can also see that if we do not use measurements accurately, things do not turn out the way they should. This shows how we need to be careful to follow instructions and directions, especially instructions and directions from God. |

GRADE LEVEL 4ᵗʰ GRADE

COURSE LENGTH   YEAR   **REVIEWED 2018-2019**

		using metric units • estimate and measure with units of mass – grams and kilograms • convert between metric units • compare several different units of time and freely convert from one unit of time to another • find the difference in time using a beginning and an end time; use elapsed time to find a beginning and an end time • measure temperature in degrees Fahrenheit or degrees Celsius • solve a problem that requires finding the original times, measurements, or quantities hat led to a result that is			

		given			
Topic 17 Data and Graphs 3 Weeks	MN State Standards 4.4.1.1 5.4.1.1	Students will: • design and use a survey with a sample size that allows accurate predictions to be made about a larger population • use bat graphs to display data • learn and understand how to draw line plots, interpret points, and recognize outliers • learn to locate points on a coordinate plane	• Complete related whole group and small group activities • Classroom and small group discussions • Complete textbook assignments • Complete supplemental worksheets • Timed Tests • Occasional games • Play review game • Topic Test	• *Envision Math 4* Teacher Edition • *Envision Math 4* Student Textbook • Various Teacher Resources • Various Math Games	• Understanding a set of data helps people in almost every job. When we know how to interpret data and graphs, we are better able to identify needs of those around us. We can also communicate needs to others more efficiently.

CCS COURSE MAP
SUBJECT: MATH

GRADE LEVEL 4ᵗʰ GRADE
COURSE LENGTH   YEAR   **REVIEWED 2018-2019**

		using ordered pairs • use line graphs to see changes in data over time • calculate the mean of a collection of values • identify the mode, median, and range for numerical data sets • use stem-and-leaf plots to organize data by place value • use circle graphs to show parts of a whole • make and use graphs to display data and solve problems			

CCS COURSE MAP
SUBJECT: MATH

GRADE LEVEL 4ᵗʰ GRADE
COURSE LENGTH   YEAR   **REVIEWED 2018-2019**

	MN Math Standards	Students will:			
Topic 18 Equations 2 Weeks	4.2.1.1 4.2.2.1 4.2.2.2 5.3.2.3	• learn and understand the properties of equality • learn and understand how to use addition and subtraction to solve equations • learn and understand how to use multiplication and division to solve equations • solve an inequality by finding all the values and make it true • solve problems that require finding the original times, measurements, or quantities that led to a result that is given	• Complete related whole group and small group activities • Classroom and small group discussions • Complete textbook assignments • Complete supplemental worksheets • Timed Tests • Occasional games • Play review game • Topic Test	• *Envision Math 4* Teacher Edition • *Envision Math 4* Student Textbook • Various Teacher Resources • Various Math Games	• Learning about equations like these shows us that often there is just one correct answer. This shows that God is a God of precision and accuracy.

CCS COURSE MAP
SUBJECT: MATH

GRADE LEVEL 4ᵗʰ GRADE
COURSE LENGTH   YEAR   **REVIEWED 2018-2019**

	MN State Standards	Students will:			
Topic 19 Transformations, Congruence, and Symmetry 2 Weeks	4.3.3.1 4.3.3.2 4.3.3.3 4.3.3.4	• identify translations of plane figures • identify reflections of plane figures • identify rotations of plane figures • use transformations to see if two plane figures are congruent • determine if a plane figure has line symmetry and, if so, how many lines of symmetry it has • identify rotational symmetry and determine an angle measure to describe a rotation • determine when two shapes are similar and use pictures to visualize similarity	• Complete related whole group and small group activities • Classroom and small group discussions • Complete textbook assignments • Complete supplemental worksheets • Timed Tests • Occasional games • Play review game • Topic Test	• *Envision Math 4* Teacher Edition • *Envision Math 4* Student Textbook • Various Teacher Resources • Various Math Games	• Learning about transformations, congruence, and symmetry reveals a lot about creation. • We can also see how so much of creation uses symmetry – just look at the human body.

CCS COURSE MAP
SUBJECT: MATH

GRADE LEVEL 4th GRADE

COURSE LENGTH   YEAR   **REVIEWED 2018-2019**

	MN State Standards	Students will:			
Topic 20 Probability 1 Week	6.4.1.1 6.4.1.2 7.4.3.2	• use objects and pictures to count combinations of data or objects in a problem • represent and count the number of outcomes with a tree diagram • determine the probability of an event and write it as a fraction • use reasoning to solve problems	• Complete related whole group and small group activities • Classroom and small group discussions • Complete textbook assignments • Complete supplemental worksheets • Timed Tests • Occasional games • Play review game • Topic Test	• *Envision Math 4* Teacher Edition • *Envision Math 4* Student Textbook • Various Teacher Resources • Various Math Games	• We can learn all we want about probability, but we know that God is Sovereign, and He is ultimately in control of everything that happens in this world. God is the one in control of the outcomes – not probability and chance.