

Michigan District Lutheran School Curriculum *SCOPE & SEQUENCE*

Grade Level:6	Curricular Area: Mathematics			
Unit 1: Numbers & Operations	Unit 2: Algebra	Unit 3: Measurement	Unit 4: Geometry	Unit 5: Data and Probability
1A Multiply and divide fractions	2A Calculate rates	3A Convert within measurement systems	4A Understand and apply basic properties	5A Understand the concept of probability and solve problems
1B Represent rational numbers as fractions or decimals	2B Understand the coordinate plane	3B Find volume and surface area	4B Understand the concept of congruence and basic transformations	
1C Add and subtract integers and rational numbers	2C Use variables, write expressions and equations, and combine like terms		4C Construct geometric shapes	
1D Solve decimal, percentage and rational number problems	2D Represent linear functions using tables, equations, and graphs			
1E Use exponents	2E Solve equations			
1F Understand rational numbers and their location on the number line				



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Michigan District Lutheran School Curriculum *OBJECTIVES*

Curricular Area: Mathematics Grade 6 – Number and Operations

Objective: 1A: Multiply and divide fractions

Grade Level Content Expectations (GLCEs)	Michigan Benchmarks	Teaching The Faith Activities
<p>N.MR.06.01 Understand division of fractions as the inverse of multiplication, e.g., if $4/5 \div 2/3 =$, then $2/3 \cdot = 4/5$, so $= 4/5 \cdot 3/2 = 12/10$.</p> <p>N.FL.06.02 Given an applied situation involving dividing fractions, write a mathematical statement to represent the situation.</p> <p>N.MR.06.03 Solve for the unknown in equations such as: $1/4 \div = 1$, $3/4 \div = 1/4$, and $1/2 = 1 \cdot$</p> <p>N.FL.06.04 Multiply and divide any two fractions, including mixed numbers, fluently.</p>	<p>V.1.2.2. Methods of computation include proficiency with mental calculation, paper and pencil, and calculators; students must know which method is most appropriate for a given task.</p> <p>V.2.1 Students develop both symbol sense and number sense as they learn to read, write and speak the language of mathematics.</p>	<p>Each time Moses took a census he was to collect a “ransom” from every male, 20 years of age or older. The amount per person was $1/2$ shekel or 20 gerahs. A shekel weighs $2/5$ oz. What would each persons offering weigh?</p> <p>If there were 603,550 men (Exodus 38:26) what would the total weight be in ounces? In pounds? In shekels?</p>



Michigan District Lutheran School Curriculum *TEACHER ACCOUNTABILITY RECORD*

1A: Multiply and divide fractions Teacher name: _____ Grade Level: 6	Curricular Area: Mathematics/Unit 1- Numbers and Operations				
Michigan Standard, Benchmark, or <i>GLCE</i> (Italics indicates the one used)	School Year: _____ Dates Taught (month/day/initials): _____				
V.1.2.2. Methods of computation include proficiency with mental calculation, paper and pencil, and calculators; students must know which method is most appropriate for a given task.					
V.2.1 Students develop both symbol sense and number sense as they learn to read, write and speak the language of mathematics.					
N.MR.06.03 Solve for the unknown in equations such as: $1/4 \div = 1$, $3/4 \div = 1/4$, and $1/2 = 1$					
N.MR.06.01 Understand division of fractions as the inverse of multiplication, e.g., if $4/5 \div 2/3 =$, then $2/3 \cdot = 4/5$, so $= 4/5 \cdot 3/2 = 12/10$.					



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Objective: 1B: Represent rational numbers as fractions or decimals

Grade Level Content Expectations (GLCEs)	Michigan Benchmarks	Teaching The Faith Activities
<p>N.ME.06.05 Order rational numbers and place them on the number line.</p> <p>N.ME.06.06 Represent rational numbers as fractions or terminating decimals when possible, and translate between these representations.</p> <p>N.ME.06.07 Understand that a fraction or a negative fraction is a quotient of two integers, e.g., $-8/3$ is -8 divided by 3.</p>	<p>IV.1.1 . An intuitive quantitative sense develops from students' investigations of numbers and their properties.</p> <p>IV.1.3 . Important properties provide students with deeper insight into numbers and their uses.</p> <p>IV.2.1 . Students recognize and understand numbers that they encounter in varied formats</p> <p>IV.2.2 . Numeracy requires that students recognize when numbers are equivalent even though they may be represented in different formats.</p> <p>IV.3.1 . Relationships of equality and inequality are among the most fundamental in mathematics.</p>	<p>God created us as unique individuals and though we share characteristics, no one is exactly alike.</p> <p>As a preliminary activity, students sort rocks, plants, flowers buttons etc, according to various characteristics. Discuss several ways to sort people, hair, eye color, height, etc. Work with fractional parts and ratios, decimals and percent to express relationships of groups and the whole class.</p> <p>What percent has a birthday in March? What percent have blue eyes? What is the ratio of brown eyes to blue eyes?</p>



Michigan District Lutheran School Curriculum *TEACHER ACCOUNTABILITY RECORD*

1B: Represent rational numbers as fractions or decimals Teacher name: _____ Grade Level: 6	Curricular Area: Mathematics/Unit 1-Numbers and Operations				
Michigan Standard, Benchmark, or <i>GLCE</i> (Italics indicates the one used)	School Year: _____ Dates Taught (month/day/initials): _____				
N.ME.06.05 Order rational numbers and place them on the number line.					
N.ME.06.06 Represent rational numbers as fractions or terminating decimals when possible, and translate between these representations.					
N.ME.06.07 Understand that a fraction or a negative fraction is a quotient of two integers, e.g., $-8/3$ is -8 divided by 3 .					



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Objective: 1C: Add and subtract integers and rational numbers

Grade Level Content Expectations (GLCEs)	Michigan Benchmarks	Teaching The Faith Activities
<p>N.MR.06.08 Understand integer subtraction as the inverse of integer addition. Understand integer division as the inverse of integer multiplication.</p> <p>N.FL.06.09 Add and multiply integers between -10 and 10; subtract and divide integers using the related facts. Use the number line and chip models for addition and subtraction.</p> <p>N.FL.06.10 Add, subtract, multiply and divide positive rational numbers fluently.</p> <p>N.ME.06.11 Find equivalent ratios by scaling up or scaling down.</p>	<p>IV.1.3 . Important properties provide students with deeper insight into numbers and their uses.</p> <p>IV.3.2. . By classifying numbers according to their properties and identifying important numerical relationships, students develop a deeper understanding of numbers</p> <p>V.1.2 . Methods of computation include proficiency with mental calculation, paper and pencil, and calculators; students must know which method is most appropriate for a given task.</p>	<p>In Ezra 1 there is an extensive census of Jewish exiles returning to Jerusalem and other cities in Judah. Totals are listed according to subclans. Have the students write addition and subtraction problems as well as ratio and percent problems.</p> <p>The leaders of the group gave a freewill offering of 61,000 drachmas of gold and 5,000 minas of silver. Use the following values to compute the weight for the gold and silver offering: 1 mina = 100 drachmas = 1 ¼ pounds.</p>



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Michigan District Lutheran School Curriculum *TEACHER ACCOUNTABILITY RECORD*

1C: Add and subtract integers and rational numbers Teacher name: _____ Grade Level: 6	Curricular Area: Mathematics/Unit 1-Numbers and Operations School Year:				
Michigan Standard, Benchmark, or <i>GLCE</i> (Italics indicates the one used)	Dates Taught (month/day/initials):				
N.MR.06.08 Understand integer subtraction as the inverse of integer addition. Understand integer division as the inverse of integer multiplication					
N.FL.06.09 Add and multiply integers between -10 and 10; subtract and divide integers using the related facts. Use the number line and chip models for addition and subtraction.					
N.FL.06.10 Add, subtract, multiply and divide positive rational numbers fluently					
N.ME.06.11 Find equivalent ratios by scaling up or scaling down.					



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Objective: 1D: Solve decimal, percentage and rational number problems

Grade Level Content Expectations (GLCEs)	Michigan Benchmarks	Teaching The Faith Activities
<p>N.FL.06.12 Calculate part of a number given the percentage and the number.</p> <p>N.MR.06.13 Solve contextual problems involving percentages such as sales taxes and tips</p> <p>N.FL.06.14 For applied situations, estimate the answers to calculations involving operations with rational numbers.</p> <p>N.FL.06.15 Solve applied problems that use the four operations with appropriate decimal numbers.</p>	<p>IV.2.4 Estimation is one of the most important skills for students to develop and use on a regular basis.</p> <p>IV.2.5 . Knowing what numbers to use and how to represent them is key to students’ abilities to solve problems.</p> <p>V.1.2 1. Understanding the basic computational operations is essential for competence in mathematics, but there is no one way to perform a calculation.</p> <p>V.1.4 The ultimate reason for mastering the computational operations and their algorithms is to solve problems</p>	<p>Do some research onto the fiscal needs of your congregation and school. Answer the following questions.</p> <ul style="list-style-type: none"> • How much money is needed to operate? • How much is that per communicant member? • What percent over or under the budget is each weeks offerings?



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Michigan District Lutheran School Curriculum *TEACHER ACCOUNTABILITY RECORD*

1D: Solve decimal, percentage and rational number problems Teacher name: _____ Grade Level: 6	Curricular Area: Mathematics/Unit1-Numbers and Operations				
Michigan Standard, Benchmark, or <i>GLCE</i> (Italics indicates the one used)	School Year:				
N.FL.06.12 Calculate part of a number given the percentage and the number.					
N.MR.06.13 Solve contextual problems involving percentages such as sales taxes and tips					
N.FL.06.14 For applied situations, estimate the answers to calculations involving operations with rational numbers.					
N.FL.06.15 Solve applied problems that use the four operations with appropriate decimal numbers.					



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Objective: 1E: Use Exponents

Grade Level Content Expectations (GLCEs)	Michigan Benchmarks	Teaching The Faith Activities																		
<p>N.ME.06.16 Understand and use integer exponents, excluding powers of negative bases; express numbers in scientific notation.</p>	<p>IV.1.2 . A solid understanding of the numeration system is essential for later success with calculations.</p> <p>IV.3.4 . Numbers that are related exponentially exhibit important relationships that students will encounter in a variety of applications</p>	<p>When our God created the world, He created the universe. In this chart change standard notation to scientific and vice versa. Distance from sun:</p> <table data-bbox="1348 435 1690 711"> <tr> <td>Mercury</td> <td>36,000,000</td> </tr> <tr> <td>Venus</td> <td>6.7×10^7</td> </tr> <tr> <td>Earth</td> <td>93,000,000</td> </tr> <tr> <td>Mars</td> <td>1.92×10^8</td> </tr> <tr> <td>Jupiter</td> <td>483,000,000</td> </tr> <tr> <td>Saturn</td> <td>8.86×10^8</td> </tr> <tr> <td>Uranus</td> <td>1,782,000,000</td> </tr> <tr> <td>Neptune</td> <td>2.793×10^9</td> </tr> <tr> <td>Pluto</td> <td>3,670,000,000</td> </tr> </table>	Mercury	36,000,000	Venus	6.7×10^7	Earth	93,000,000	Mars	1.92×10^8	Jupiter	483,000,000	Saturn	8.86×10^8	Uranus	1,782,000,000	Neptune	2.793×10^9	Pluto	3,670,000,000
Mercury	36,000,000																			
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Jupiter	483,000,000																			
Saturn	8.86×10^8																			
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Neptune	2.793×10^9																			
Pluto	3,670,000,000																			



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Michigan District Lutheran School Curriculum *TEACHER ACCOUNTABILITY RECORD*

1E: Use exponents Teacher name: _____ Grade Level: 6	Curricular Area: Mathematics/Unit 1-Numbers and Operations				
Michigan Standard, Benchmark, or <i>GLCE</i> (Italics indicates the one used)	School Year:				
N.ME.06.16 Understand and use integer exponents, excluding powers of negative bases; express numbers in scientific notation.	Dates Taught (month/day/initials):				



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Objective: 1F: Understand rational numbers and their location on the number line

Grade Level Content Expectations (GLCEs)	Michigan Benchmarks	Teaching The Faith Activities
<p>N.ME.06.17 Locate negative rational numbers (including integers) on the number line; know that numbers and their negatives add to 0, and are on opposite sides and at equal distance from 0 on a number line.</p> <p>N.ME.06.18 Understand that rational numbers are quotients of integers (non-zero denominators), e.g., a rational number is either a fraction or a negative fraction.</p> <p>N.ME.06.19 Understand that 0 is an integer that is neither negative nor positive.</p> <p>N.ME.06.20 Know that the absolute value of a number is the value of the number ignoring the sign; or is the distance of the number from 0.</p>	<p>IV.1.1 . An intuitive quantitative sense develops from students' investigations of numbers and their properties</p> <p>IV.1.3 . Important properties provide students with deeper insight into numbers and their uses.</p> <p>IV.3.1 Relationships of equality and inequality are among the most fundamental in mathematics.</p>	



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Michigan District Lutheran School Curriculum *TEACHER ACCOUNTABILITY RECORD*

1F: Understand rational numbers and their location on the number line Teacher name: _____ Grade Level: 6	Curricular Area: Mathematics/Unit 1-Numbers and Operations School Year:				
Michigan Standard, Benchmark, or <i>GLCE</i> (Italics indicates the one used)	Dates Taught (month/day/initials):				
N.ME.06.17 Locate negative rational numbers (including integers) on the number line; know that numbers and their negatives add to 0, and are on opposite sides and at equal distance from 0 on a number line.					
N.ME.06.18 Understand that rational numbers are quotients of integers (non-zero denominators), e.g., a rational number is either a fraction or a negative fraction.					
N.ME.06.19 Understand that 0 is an integer that is neither negative nor positive.					
N.ME.06.20 Know that the absolute value of a number is the value of the number ignoring the sign; or is the distance of the number from 0.					



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Michigan District Lutheran School Curriculum *OBJECTIVES*

Curricular Area: Mathematics Grade 6 – Algebra

Objective: 2A: Calculate Rates

Grade Level Content Expectations (GLCEs)	Michigan Benchmarks	Teaching The Faith Activities
A.PA.06.01 Solve applied problems involving rates, including speed, e.g., if a car is going 50 mph, how far will it go in 3 1/2 hours?	IV.3.2 Students learn the importance of making comparisons between numbers, especially as ratios and rates. V.2.5 Students employ algebraic and analytic thinking and the power of technology to explore problems that reveal the many ways that mathematics is used in a wide variety of contemporary applications.	Apply ratio, proportion, and percent concepts to problems on such common topics as sales tax, discounts, interest, unit pricing, and comparative buying



Michigan District Lutheran School Curriculum *TEACHER ACCOUNTABILITY RECORD*

2A: Calculate Rates Teacher name: _____ Grade Level: 6	Curricular Area: Mathematics/ Unit 2- Algebra School Year:				
Michigan Standard, Benchmark, or <i>GLCE</i> (Italics indicates the one used)	Dates Taught (month/day/initials):				
A.PA.06.01 Solve applied problems involving rates, including speed, e.g., if a car is going 50 mph, how far will it go in 3 ½ hours?					



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Objective: 2B: Understand the coordinate plane

Grade Level Content Expectations (GLCEs)	Michigan Benchmarks	Teaching The Faith Activities
A.RP.06.02 Plot ordered pairs of integers and use ordered pairs of integers to identify points in all four quadrants of the coordinate plane.	II.2.4 . Locating all the points that satisfy a condition or the special points that satisfy two or more conditions is an important spatial ability.	Highlight the way God has created human beings to be symmetrical and proportional. Measure circumferences of the head, neck, and waist, length of arm, leg and hand. Make a scatter gram for various characteristics, For example plot a point for each person’s head circumference as compared to height. Does the scatter gram show a correlation?



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Michigan District Lutheran School Curriculum *TEACHER ACCOUNTABILITY RECORD*

2B: Understand the coordinate plane Teacher name: _____ Grade Level: 6	Curricular Area: Mathematics/ Unit 2-Algebra School Year:				
Michigan Standard, Benchmark, or <i>GLCE</i> (Italics indicates the one used)	Dates Taught (month/day/initials):				
A.RP.06.02 Plot ordered pairs of integers and use ordered pairs of integers to identify points in all four quadrants of the coordinate plane.					



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Objective: 2C: Use variables, write expressions and equations, and combine like terms

Grade Level Content Expectations (GLCEs)	Michigan Benchmarks	Teaching The Faith Activities
<p>A.FO.06.03 Use letters, with units, to represent quantities in a variety of contexts, e.g., y lbs., k minutes, x cookies.</p> <p>A.FO.06.04 Distinguish between an algebraic expression and an equation.</p> <p>A.FO.06.05 Use standard conventions for writing algebraic expressions, e.g., $2x + 1$ means “two times x, plus 1” and $2(x + 1)$ means “two times the quantity (x + 1).”</p> <p>A.FO.06.06 Represent information given in words using algebraic expressions and equations.</p> <p>A.FO.06.07 Simplify expressions of the first degree by combining like terms, and evaluate using specific values.</p>	<p>V.2.1 . Students develop both symbol sense and number sense as they learn to read, write and speak the language of mathematics</p>	<p>Use the value of silver and gold on today’s market to calculate the value of the offerings listed in Exodus 38:25 What is today’s value of the items used in making the tabernacle?</p>



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Michigan District Lutheran School Curriculum *TEACHER ACCOUNTABILITY RECORD*

<p>2C: Use variables, write expressions and equations and combine like terms Teacher name: _____ Grade Level: 6</p>	<p>Curricular Area: Mathematics/ Unit 2- Algebra School Year:</p>				
<p>Michigan Standard, Benchmark, or <i>GLCE</i> (Italics indicates the one used)</p>	<p>Dates Taught (month/day/initials):</p>				
<p>A.FO.06.03 Use letters, with units, to represent quantities in a variety of contexts, e.g. y lbs. , k minutes, x cookies.</p>					
<p>A.FO.06.04 Distinguish between an algebraic expressions and an equation.</p>					
<p>A.FO.06.05 Use standard conventions for writing algebraic expressions, e.g., $2x+1$ means “two times x, plus 1” and $2(X+1)$ means “two times the quantity (x+1)”</p>					
<p>A.FO.06.06 Represent information given in words using algebraic expressions and equations.</p>					
<p>A.FO.06.07 Simplify expressions of the first degree by combining like terms, and evaluate using specific values.</p>					



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Objective: 2D: Represent linear functions using tables, equations and graphs.

Grade Level Content Expectations (GLCEs)	Michigan Benchmarks	Teaching The Faith Activities
<p>A.RP.06.08 Understand that relationships between quantities can be suggested by graphs and tables.</p> <p>A.PA.06.09 Solve problems involving linear functions whose input values are integers; write the equation; graph the resulting ordered pairs of integers, e.g., given c chairs, the “leg function” is $4c$; if you have 5 chairs, how many legs?; if you have 12 legs, how many chairs?</p> <p>A.RP.06.10 Represent simple relationships between quantities using verbal descriptions, formulas or equations, tables, and graphs, e.g., perimeter-side relationship for a square, distance-time graphs, and conversions such as feet to inches.</p>	<p>I.1.2 Patterns and relationships are represented and communicated in diverse ways</p> <p>I.2.4 . Variability is represented in a variety of symbolic forms</p> <p>I.2.6 . Understanding variability and change is a basis for making sense of the world and of mathematical ideas</p> <p>III.1.3 . Since different representations highlight different patterns in the data, students must make critical judgments.</p> <p>V.2.1 Students develop both symbol sense and number sense as they learn to read, write and speak the language of mathematics</p> <p>V.2.4 Students learn analytic thinking most effectively when it is studied in the context of problems and applications.</p>	



Michigan District Lutheran School Curriculum *TEACHER ACCOUNTABILITY RECORD*

2D: Represent linear functions using tables, equations and graphs. Teacher name: _____ Grade Level: 6	Curricular Area: Mathematics/ Unit 2- Algebra School Year:				
Michigan Standard, Benchmark, or <i>GLCE</i> (Italics indicates the one used)	Dates Taught (month/day/initials):				
A.RP.06.08 Understand that relationships between quantities can be by graphs and tables.					
A.PA.06.09 Solve problems involving linear functions whose input values are integers; write the equation ; graph the resulting ordered pairs if integers					
A.RP.06.10 Represent simple relationships between quantities using verbal descriptions, formulas or equations, tables, and graphs, e.g., perimeter-side relationship for a square, distance-time graphs, and conversions such as feet to inches.					



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Objective: 2E: Solve equations

Grade Level Content Expectations (GLCEs)	Michigan Benchmarks	Teaching The Faith Activities
<p>A.FO.06.11 Relate simple linear equations with integer coefficients, e.g., $3x = 8$ or $x + 5 = 10$, to particular contexts and solve.</p> <p>A.FO.06.12 Understand that adding or subtracting the same number to both sides of an equation creates a new equation that has the same solution.</p> <p>A.FO.06.13 Understand that multiplying or dividing both sides of an equation by the same non-zero number creates a new equation that has the same solutions.</p> <p>A.FO.06.14 Solve equations of the form $ax + b = c$, e.g., $3x + 8 = 15$ by hand for positive integer coefficients less than 20, use calculators otherwise, and interpret the results</p>	<p>IV.1.3 Important properties provide students with deeper insight into numbers and their uses.</p> <p>V.1.3 . Understanding the operations requires that students also understand the properties of those operations and how to apply them</p> <p>V.2.1 Students develop both symbol sense and number sense as they learn to read, write and speak the language of mathematics.</p> <p>V.2.3 . Solving mathematical problems involves a process as well as a product; the context of the problem determines the nature of the solution.</p>	<p>Use the calculator to solve verbal problems involving whole number operations, decimal operations, money amounts, and/or percent.</p> <p>In Leviticus 27:32 God mentions a tithe (10%). If you give a tithe of your allowance to church, how much will you give?</p> <p>The Israelites tithed things other than money. If you inherited 2,000 talents of gold, 5,000 sheep, 10,500 cattle, and 450 oxen, what would your tithe be?</p>



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Michigan District Lutheran School Curriculum *TEACHER ACCOUNTABILITY RECORD*

2E: Solve equations Teacher name: _____ Grade Level: 6	Curricular Area: Mathematics/ Unit 2- Algebra				
Michigan Standard, Benchmark, or <i>GLCE</i> (Italics indicates the one used)	School Year: _____ Dates Taught (month/day/initials): _____				
A.FO.06.11 Relate simple linear equations with integer coefficients , e.g., $3x=8$ or $x+5=10$, to particular contexts and solve.					
A.FO.06.12 Understand that adding or subtracting the same number to both sides of an equation creates a new equations that has the same solutions.					
A.FO.06.13 Understand that multiplying or dividing both sides of an equations by the same non-zero number, creates a new equation that has the same solutions.					
A.FO.06.14 Solve equations of the form $ax=b=c$, e.g., $3x+8=15$ by hand for positive integer coefficients less than 20, use a calculator otherwise, and interpret the results.					



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Michigan District Lutheran School Curriculum *OBJECTIVES*

Curricular Area: Mathematics Grade 6 – Measurement

Objective: 3A: Convert within measurement systems

Grade Level Content Expectations (GLCEs)	Michigan Benchmarks	Teaching The Faith Activities
M.UN.06.01 Convert between basic units of measurement within a single measurement system, e.g., square inches to square feet.	II.3.5 It is not always possible to measure a quantity directly; in such cases students must use other indirect means.	



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Michigan District Lutheran School Curriculum *TEACHER ACCOUNTABILITY RECORD*

3A: Convert within measurement systems Teacher name: _____ Grade Level: 6	Curricular Area: Mathematics/ Unit 3- Measurement School Year:				
Michigan Standard, Benchmark, or <i>GLCE</i> (Italics indicates the one used)	Dates Taught (month/day/initials):				
M.UN.06.01 Convert between basic units of measurement within a single measurement system, e.g., square inches to square feet.					



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Objective: 3B: Find volume and surface area

Grade Level Content Expectations (GLCEs)	Michigan Benchmarks	Teaching The Faith Activities
M.PS.06.02 Draw patterns (of faces) for a cube and rectangular prism that, when cut, will cover the solid exactly (nets). M.TE.06.03 Compute the volume and surface area of cubes and rectangular prisms given the lengths of their sides, using formulas	II.1.4 . Drawing and constructing shapes in two and three dimensions are important ways to represent the world. II.3.5 It is not always possible to measure a quantity directly; in such cases students must use other indirect means.	Find the perimeter, area, and volume of these parts of Solomon’s Temple: Temple proper 60 cubits X 20 cubits X 30 cubits Holy of Holies cube of 20 cubits Sanctuary 40 cubits X 20 cubits X 30 cubits



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Michigan District Lutheran School Curriculum *TEACHER ACCOUNTABILITY RECORD*

3B: Find volume and surface area Teacher name: _____ Grade Level: 6	Curricular Area: Mathematics/ Unit 3 - Measurement School Year:				
Michigan Standard, Benchmark, or <i>GLCE</i> (Italics indicates the one used)	Dates Taught (month/day/initials):				
M.PS.06.02 Draw patterns (of faces) for a cube and rectangular prism that, when cut, will cover the solid exactly (nets).					
M.TE.06.03 Compute the volume and surface area of cubes and rectangular prisms given the lengths of their sides, using formulas.					



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Michigan District Lutheran School Curriculum *OBJECTIVES*

Curricular Area: Mathematics Grade 6 – Geometry

Objective: 4A: Understand and apply basic properties

Grade Level Content Expectations (GLCEs)	Michigan Benchmarks	Teaching The Faith Activities
<p>G.GS.06.01 Understand and apply basic properties of lines, angles, and triangles, including:</p> <ul style="list-style-type: none"> • triangle inequality • relationships of vertical angles, complementary angles, supplementary angles • congruence of corresponding and alternate interior angles when parallel lines are cut by a transversal, and that such congruencies imply parallel lines • locate interior and exterior angles of any triangle, and use the property that an exterior angle of a triangle is equal to the sum of the remote (opposite) interior angles • know that the sum of the exterior angles of a convex polygon is 360° 	<p>II.1.6 Figures that are alike in size and/or shape and figures that have special relationships to each other lead to important generalizations.</p>	<p>Build a scale model of the ark</p> <p>Build a scale model of Solomon’s Temple</p>



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Michigan District Lutheran School Curriculum *TEACHER ACCOUNTABILITY RECORD*

4A: Understand and apply basic properties Teacher name: _____ Grade Level: 6	Curricular Area: Mathematics/Unit 4- Geometry School Year:				
Michigan Standard, Benchmark, or <i>GLCE</i> (Italics indicates the one used)	Dates Taught (month/day/initials):				
G.GS.06.01 Understand and apply basic properties of lines, angles, and triangles including: * triangle inequality * relationships of vertical angles, complementary angles, supplementary angles * congruence of corresponding and alternate interior angles when parallel lines are cut by a transversal, and that such congruencies imply parallel lines * locate interior and exterior angles of any triangle, and use the property that an exterior angle of a triangle is equal to the sum of the remote (opposite) interior angles * know that the sum of the exterior angles of a convex polygon is 360 degrees					



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Objective: 4B: Understand the concept of congruence and basic transformations

Grade Level Content Expectations (GLCEs)	Michigan Benchmarks	Teaching The Faith Activities
<p>G.GS.06.02 Understand that for polygons, congruence means corresponding sides and angles have equal measures</p> <p>G.TR.06.03 Understand the basic rigid motions in the plane (reflections, rotations, translations), relate these to congruence, and apply them to solve problems.</p> <p>G.TR.06.04 Understand and use simple compositions of basic rigid transformations, e.g., a translation followed by a reflection.</p>	<p>II.1.5 . Understanding shapes requires recognition of what happens when shapes are combined, dissected or transformed.</p> <p>II.1.6 Figures that are alike in size and/or shape and figures that have special relationships to each other lead to important generalizations</p> <p>II.2.3 . Certain actions can change the size, shape, position or orientation of an object.</p> <p>II.2.5 . Concepts of position, direction and orientation enable students to describe the physical world and to solve problems.</p>	



Michigan District Lutheran School Curriculum *TEACHER ACCOUNTABILITY RECORD*

4B: Understand the concept of congruence and basic transformations Teacher name: _____ Grade Level: 6	Curricular Area: Mathematics/ Unit 4 - Geometry School Year:				
Michigan Standard, Benchmark, or <i>GLCE</i> (Italics indicates the one used)	Dates Taught (month/day/initials):				
G.GS.06.02 Understand that for polygons, congruence means corresponding sides and angles have equal measures					
G.TR.06.03 Understand the basic rigid motions in the plane (reflections, rotations, translations) relate these to congruence, and apply them to solve problems					
G.TR.06.04 Understand and use simple compositions of basic rigid transformations, e.g., a translation followed by a reflection					



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Objective: 4C: Construct geometric shapes

Grade Level Content Expectations (GLCEs)	Michigan Benchmarks	Teaching The Faith Activities
G.SR.06.05 Use paper folding to perform basic geometric constructions of perpendicular lines, midpoints of line segments and angle bisectors; justify informally	II.1.4 . Drawing and constructing shapes in two and three dimensions are important ways to represent the world. II.2.2 Concepts of direction, orientation, relative position and symmetry enable students to describe objects relative to their surroundings.	Make a drawing of the ark, both top and side views.



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Michigan District Lutheran School Curriculum *TEACHER ACCOUNTABILITY RECORD*

4C: Construct geometric shapes Teacher name: _____ Grade Level: 6	Curricular Area: Mathematics/ Unit 4 - Geometry				
Michigan Standard, Benchmark, or <i>GLCE</i> (Italics indicates the one used)	School Year: Dates Taught (month/day/initials):				
G.GS.06.05 Use paper folding to perform basic geometric construction of perpendicular lines, midpoints of line segments and angle bisectors; justify informally					



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Michigan District Lutheran School Curriculum *OBJECTIVES*

Curricular Area: Mathematics Grade 6 – Data and Probability

Objective: 5A: Understand the concept of probability and solve problems

Grade Level Content Expectations (GLCEs)	Michigan Benchmarks	Teaching The Faith Activities
<p>D.PR.06.01 Express probabilities as fractions, decimals, or percentages between 0 and 1; know that 0 probability means an event will not occur and that probability 1 means an event will occur</p> <p>D.PR.06.02 Compute probabilities of events from simple experiments with equally likely outcomes, e.g., tossing dice, flipping coins, spinning spinners, by listing all possibilities and finding the fraction that meets given conditions</p>	<p>VI.1.1 . Students develop an understanding of the concepts of chance and uncertainty.</p> <p>VI.1.2 . Students express the likelihood of chance events in terms of probabilities.</p> <p>VI.1.3 Through experiments students learn that some outcomes are affected by prior events, while others are independent</p> <p>VI.1.5 . Making predictions and decisions in the face of uncertainty are essential skills for coping with the modern world.</p>	<p>According to the laws of theoretical probability, what is the probability that Joseph would have seated his brothers in their birth order by accident? (1 out of 11 or 1 out of 11!= 13,305,600)</p>



Michigan District Lutheran School Curriculum *TEACHER ACCOUNTABILITY RECORD*

5A: Understand the concept of probability and solve problems Teacher name: _____ Grade Level: 6	Curricular Area: Mathematics/ Unit 5 – Data and Probability				
Michigan Standard, Benchmark, or <i>GLCE</i> (Italics indicates the one used)	School Year: _____ Dates Taught (month/day/initials): _____				
D.PR.06.01 Express probabilities as fractions, decimals, or percentages between 0 and 1; know that 0 probability means an event will not occur and that probability 1 means an event will occur					
D.PR.06.02 Compute probabilities of events from simple experiments with equally likely outcomes, e.g., tossing dice, flipping coins, spinning spinners, by listing all possibilities and finding the fractions that meets given conditions					



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