Michigan District Lutheran School Curriculum *SCOPE & SEQUENCE*

Grade Level: 3	**Curricular Area: Mathematics**		
Unit 1: **Number and Operations**	**Unit 2:** **Measurement**	**Unit 3:** **Geometry**	**Unit 4:** **Data and Probability**
1A **Understand and use number notation and place value**	**2A** **Measure and use units for length, weight, temperature and time**	**3A** **Recognize the basic elements of geometric objects**	**4A** **Use bar graphs**
1B **Count in steps, and understand even and odd numbers**	**2B** **Understand meaning of area and perimeter and apply in problems**	**3B** **Name and explore properties of shapes**	
1C **Add and subtract whole numbers**	**2C** **Estimate perimeter and area**	**3C** **Explore and name three-dimensional solids**	
1D **Multiply and divide whole numbers**	**2D** **Solve measurement problems**		
1E **Problem solving with whole numbers**			
1F **Understand simple fractions, relation to the whole, and addition and subtraction of fractions**			
1G **Understand simple decimal fractions in relation to money**			

Michigan District Lutheran School Curriculum *OUTCOMES*

Curricular Area: Mathematics Grade 3 – Unit 1: Number and Operations

Outcome 1A: Understand and use number notation and place value

Grade Level Content Expectations (GLCEs)	**Michigan Benchmarks**	**Teaching the Faith Activities**
N.ME.03.01 Read and write numbers to 10,000 in both numerals and words, and relate them to the quantities they represent, e.g., relate numeral or written word to a display of dots or objects. N.ME.03.02 Identify the place value of a digit in a number, e.g., in 3,241, 2 is in the hundreds place. Recognize and use expanded notation for numbers using place value through 9, 999, e.g., 2,517 is 2000+ 500+10+ 7; 4 hundreds and 2 ones is 402.* N.ME.03.03 Compare and order numbers up to 10,000.	IV.1.1. Develop an understanding of whole numbers and read, write and count using whole numbers; investigate basic concepts of fractions and decimals. IV.1.2. Investigate and develop an understanding of the base-10 place-value system. IV.1.3. Develop an understanding of the properties of numbers (e.g., order) and of the properties of the special numbers 0 and 1. IV.2.1. Represent whole numbers, fractions and decimals using concrete, pictorial and symbolic representations. IV.2.3. Investigate ways numbers are used (e.g., counting, ordering, naming, locating, and measuring). IV.3.1. Compare and order numbers using “equal,” “less than” or “greater than.” V.1.3. Explore properties of operations (e.g., commutative and distributive properties) and give examples of how they use those properties.	• Pull several categories from the church budget. Have students list these from greatest to least. Discuss where your church offerings are used and why certain things require a bigger portion of the budget than others. • Have children explore the 26th chapter of Numbers in the Bible, looking for population numbers and relating them to a discussion of place value and its importance.

Michigan District Lutheran School Curriculum *TEACHER ACCOUNTABILITY RECORD*

1A: Understand and use number notation and place value. **Teacher Name: _____** **Grade Level: 3**	**Curricular Area: Mathematics /Unit 1-Number and Operations** **School Year:**				
Michigan Standards, *Benchmark*, or GLCE (The *italicized* indicates the one used)	**Dates Taught (month/day/initials):**				
IV.1.1. Develop an understanding of whole numbers and read, write and count using whole numbers;					
IV.1.2. Investigate and develop an understanding of the base-10 place-value system					
IV.1.3. Develop an understanding of the properties of numbers (e.g., order) and of the properties of the special numbers 0 and 1.					
IV.2.1. Represent whole numbers, fractions and decimals using concrete, pictorial and symbolic representations.					
IV.2.3. Investigate ways numbers are used (e.g., counting, ordering, naming, locating, and measuring).					
IV.3.1. Compare and order numbers using “equal,” “less than” or “greater than.”					
V.1.3. Explore properties of operations (e.g., commutative and distributive properties) and give examples of how they use those properties.					

Outcome 1B: Count in steps, and understand even and odd numbers

Grade Level Content Expectations (GLCEs)	Michigan Benchmarks	Teaching the Faith Activities
N.ME.03.04 Count orally by 6's, 7's, 8's, and 9's starting with 0, making the connection between repeated addition and multiplication. N.ME.03.05 Know that even numbers end in 0, 2, 4, 6,or 8; name a whole number quantity that can be shared in two equal groups or grouped into pairs with no remainders; recognize even numbers as multiples of 2. Know that odd numbers end in 1, 3, 5, 7, or 9, and work with patterns involving even and odd numbers.	I.1.1. Recognize, describe and extend numerical and geometric patterns. IV.1.1. Develop an understanding of whole numbers and read, write and count using whole numbers; investigate basic concepts of fractions and decimals. IV.2.3. Investigate ways numbers are used (e.g., counting, ordering, naming, locating, and measuring). IV.3.3. Classify numbers as even or odd and explore concepts of factors and multiples.	• Find skip counting examples in God's Creation: ▪ By twos – pairs of animals ▪ By threes – leafy sections on a bunch of clover ▪ By fives – number of legs on a starfish ▪ By tens – number of toes in the classroom • Point out that God's world is filled with numbers and patterns

Michigan District Lutheran School Curriculum *TEACHER ACCOUNTABILITY RECORD*

1B: Count in steps, and understand even and odd numbers. **Teacher Name: _____** **Grade Level: 3**	**Curricular Area: Mathematics /Unit 1-Number and Operations** **School Year:**				
Michigan Standards, *Benchmark*, or GLCE (The *italicized* indicates the one used)	**Dates Taught (month/day/initials):**				
I.1.1. Recognize, describe and extend numerical and geometric patterns.					
IV.1.1. Develop an understanding of whole numbers and read, write and count using whole numbers; investigate basic concepts of fractions and decimals.					
IV.2.3. Investigate ways numbers are used (e.g., counting, ordering, naming, locating, and measuring).					
IV.3.3. Classify numbers as even or odd and explore concepts of factors and multiples.					

Outcome 1C: Add and subtract whole numbers

Grade Level Content Expectations (GLCEs)	Michigan Benchmarks	Teaching the Faith Activities
N.FL.03.06 Add and subtract fluently two numbers through 999 with regrouping and through 9,999 without regrouping.* N.FL.03.07 Estimate the sum and difference of two numbers with three digits (sums up to 1,000), and judge reasonableness of estimates. N.FL.03.08 Use mental strategies to fluently add and subtract two-digit numbers.	IV.2.4. Develop strategies for estimating quantity and evaluate the reasonableness of their estimates. V.1.2. Develop and apply the appropriate method of computation from among mental computation, estimation, paper-and-pencil or calculators; explain why they are choosing a method and how they know which operations to perform in a given situation.	▪ Make practical application of the concept of rounding numbers by using church attendance figures obtained from the church office. Round off the numbers to get an approximate number of people attending each Sunday or month. In closing at the end of the day, pray that God would bless your church so that more people will come to hear the Good news about Jesus, our Savior. ▪ Scan Genesis 5 to find the ages of several biblical characters. Estimate and find the sum or difference of their ages. Thank God that He is with us throughout all the years of our lives. ▪ Demonstrate the relationships between numerical processes by using manipulatives on an overhead projector or magnetic board. Have each child work with the same manipulative patterns that you model. Point out that these processes give math logic and order. Also note that we can see from God's creation that He works in an orderly manner.

Michigan District Lutheran School Curriculum *TEACHER ACCOUNTABILITY RECORD*

Outcome 1C: Add and subtract whole numbers **Teacher Name: _____** **Grade Level: 3**	**Curricular Area: Mathematics /Unit 1-Number and Operations** **School Year:**				
Michigan Standards, *Benchmark*, or GLCE (The *italicized* indicates the one used)	**Dates Taught (month/day/initials):**				
IV.2.4. Develop strategies for estimating quantity and evaluate the reasonableness of their estimates.					
V.1.2. Develop and apply the appropriate method of computation from among mental computation, estimation, paper-and-pencil or calculators; explain why they are choosing a method and how they know which operations to perform in a given situation.					

Outcome 1D: Multiply and divide whole numbers

Grade Level Content Expectations (GLCEs)	Michigan Benchmarks	Teaching the Faith Activities
N.MR.03.09 Use multiplication and division fact families to understand the inverse relationship of these two operations, e.g., because 3 x 8 = 24, we know that 24 ÷ 8 = 3 or 24 ÷ 3 = 8; express a multiplication statement as an equivalent division statement. N.MR.03.10 Recognize situations that can be solved using multiplication and division including finding "How many groups?" and "How many in a group?" and write mathematical statements to represent those situations.* N.FL.03.11 Find products fluently up to 10 x 10; find related quotients using multiplication and division relationships. N.MR.03.12 Find solutions to open sentences, such as 7 x = 42 or 12 ÷ = 4, using the inverse relationship between multiplication and division. N.FL.03.13 Mentally calculate simple products and quotients up to a three-digit number by a one-digit number involving multiples of 10, e.g., 500 x 6, or 400 ÷ 8. N.MR.03.14 Solve division problems involving remainders, viewing the remainder as the "number left over"; interpret based on problem context, e.g. , when we have 25 children with 4 children per group then there are 6 groups with 1 child left over.	IV.1.4. Apply their understanding of number systems to model and solve problems. V.1.1. Use manipulatives to model operations with numbers; develop their own methods of recording operations; and relate their models and recordings to standard symbolic expressions and algorithms. V.1.2. Develop and apply the appropriate method of computation from among mental computation, estimation, paper-and-pencil or calculators; explain why they are choosing a method and how they know which operations to perform in a given situation. V.1.3. Explore properties of operations (e.g., commutative and distributive properties) and give examples of how they use those properties. V.2.1. Write and solve open sentences (e.g., à + D = 5) and write stories to fit the open sentence. V.2.3. Find replacements for the variable(s) in open sentences.	▪ When giving number problems about daily life, include situations that children could see at church. For example: o There are 9 pews on the left side at church. Each pew holds 8 people. How many people can sit on the left side of the church? o There are 72 people at the early service. If each pew holds 8 people, how many pews will they use? o Model both problems with pictures first and then write the number sentence that would solve each problem. ▪ Demonstrate the relationships between numerical processes by using manipulatives on an overhead projector or magnetic board. Have each child work with the same manipulative patterns that you model. Point out that these processes give math logic and order. Also note that we can see from God's creation that He works in an orderly manner. ▪ Tell the children that Jesus used sheep to tell about God's love in the parable of the good shepherd. You, instead, will be using the illustration of sheep to teach about math. For example: o There are 5 shepherds in the field. Each shepherd has 8 sheep. How many sheep are there? o There are 9 sheep standing by the water. Each sheep has 4 legs. How many sheep are there? o There is a herd of 56 sheep. There are 7

		shepherds. How many sheep belong to each shepherd?

Michigan District Lutheran School Curriculum *TEACHER ACCOUNTABILITY RECORD*

1D: Multiply and divide whole numbers. **Teacher Name: _____** **Grade Level: 3**	**Curricular Area: Mathematics /Unit 1-Number and Operations** **School Year:**				
Michigan Standards, *Benchmark*, or GLCE (The *italicized* indicates the one used)	**Dates Taught (month/day/initials):**				
IV.1.4. Apply their understanding of number systems to model and solve problems.					
V.1.1. Use manipulatives to model operations with numbers; develop their own methods of recording operations; and relate their models and recordings to standard symbolic expressions and algorithms.					
V.1.2. Develop and apply the appropriate method of computation from among mental computation, estimation, paper-and-pencil or calculators; explain why they are choosing a method and how they know which operations to perform in a given situation.					
V.1.3. Explore properties of operations (e.g., commutative and distributive properties) and give examples of how they use those properties.					
V.2.1. Write and solve open sentences (e.g., à + D = 5) and write stories to fit the open sentence.					
V.2.3. Find replacements for the variable(s) in open sentences.					

Outcome 1E: Problem solving with whole numbers

Grade Level Content Expectations (GLCEs)	Michigan Benchmarks	Teaching the Faith Activities
N.MR.03.15 Given problems that use any one of the four operations with appropriate numbers, represent with objects, words (including "product" and "quotient"), and mathematical statements; solve.	IV.1.4. Apply their understanding of number systems to model and solve problems. IV.2.5. Select appropriate numbers and representations in order to solve problems. IV.3.5. Apply their understanding of number relationships in solving problems. V.1.4. Apply operations efficiently and accurately in solving problems.	▪ Make a list of all the tools you use to do math. Then point out that the best tool we have is a gift from God – our minds and the ability to use them. Set aside all other tools and use mental calculations to solve problems. ▪ As you work with calculators, and without belaboring the point, make a simple comment that we can thank God for the special tools we have, such as calculators that make our work faster and easier. Use brief, natural, conversational comments often to integrate the faith. These comments help children see that sharing our faith is not just a planned part of our day; it is part of everything we are and say and do.

Michigan District Lutheran School Curriculum *TEACHER ACCOUNTABILITY RECORD*

1E: Problem solving with whole numbers. **Teacher Name: _____** **Grade Level: 3**	**Curricular Area: Mathematics /Unit 1-Number and Operations** **School Year:**				
Michigan Standards, *Benchmark*, or GLCE **(The italicized indicates the one used)**	**Dates Taught (month/day/initials):**				
IV.1.4. Apply their understanding of number systems to model and solve problems.					
. IV.2.5. Select appropriate numbers and representations in order to solve problems.					
IV.3.5. Apply their understanding of number relationships in solving problems.					
V.1.4. Apply operations efficiently and accurately in solving problems.					

Outcome 1F: Understand simple fractions, relation to the whole, and addition and subtraction of fractions

Grade Level Content Expectations (GLCEs)	Michigan Benchmarks	Teaching the Faith Activities
N.ME.03.16 Understand that fractions may represent a portion of a whole unit that has been partitioned into parts of equal area or length; use the terms "numerator" and "denominator." N.ME.03.17 Recognize, name, and use equivalent fractions with denominators 2, 4, and 8, using strips as area models. N.ME.03.18 Place fractions with denominators of 2, 4, and 8 on the number line; relate the number line to a ruler; compare and order up to three fractions with denominators 2, 4, and 8. N.ME.03.19 Understand that any fraction can be written as a sum of unit fractions, e.g., ¾ = ¼ + ¼ + ¼ N.MR.03.20 Recognize that addition and subtraction of fractions with equal denominators can be modeled by joining or taking away segments on the number line.	II.2.1. Locate and describe objects in terms of their position, including front, back, inside, outside, right, left, over, under, next to, between and locations on the number line, on a coordinate graph and on a map. IV.1.1. Develop an understanding of whole numbers and read, write and count using whole numbers; investigate basic concepts of fractions and decimals. IV.1.2. Investigate and develop an understanding of the base-10 place-value system. IV.2.1. Represent whole numbers, fractions and decimals using concrete, pictorial and symbolic representations. IV.2.2. Explore and recognize different representations for the same number and explain why they are the same. IV.3.1. Compare and order numbers using "equal," "less than" or "greater than." IV.3.2. Use part-whole relationships to explore numbers, develop number concepts and understand computation. V.1.1. Use manipulatives to model operations with numbers; develop their own methods of recording operations; and relate their models and recordings to	▪ Fractions are more easily understood by children when we use concrete models. For example, fractions are readily associated with cooking. Give students measuring cups and spoons in a tub of water. Let them explore how many ¼ teaspoons make a ½ teaspoon, how many 1/8 cups in ¾ cups, etc. After students have had a chance to work with equivalent fractions, give them a simple recipe, but give them the wrong measuring cups. Let them see if they can use their knowledge of equivalent fractions to solve this problem. If the recipe turns out well, let them use their new talent to make a treat for the staff of the church to show their appreciation for the work they do.

	standard symbolic expressions and algorithms. V.2.1. Write and solve open sentences (e.g., à + D = 5) and write stories to fit the open sentence.	

Michigan District Lutheran School Curriculum *TEACHER ACCOUNTABILITY RECORD*

1F: Understand simple fractions, relation to the whole, and addition and subtraction of fractions. **Teacher Name: _____** **Grade Level: 3**	**Curricular Area: Mathematics /Unit 1-Number and Operations** **School Year:**				
Michigan Standards, *Benchmark*, or GLCE (The *italicized* indicates the one used)	**Dates Taught (month/day/initials):**				
II.2.1. Locate and describe objects in terms of their position, including front, back, inside, outside, right, left, over, under, next to, between and locations on the number line, on a coordinate graph and on a map					
IV.1.1. Develop an understanding of whole numbers and read, write and count using whole numbers; investigate basic concepts of fractions and decimals.					
IV.1.2. Investigate and develop an understanding of the base-10 place-value system.					
IV.2.1. Represent whole numbers, fractions and decimals using concrete, pictorial and symbolic representations.					
IV.2.2. Explore and recognize different representations for the same number and explain why they are the same.					
IV.3.1. Compare and order numbers using “equal,” “less than” or “greater than.”					
IV.3.2. Use part-whole relationships to explore numbers, develop number concepts and understand computation.					
V.1.1. Use manipulatives to model operations with numbers; develop their own methods of recording operations; and relate their models and recordings to standard symbolic expressions and algorithms.					
V.2.1. Write and solve open sentences (e.g., à + D = 5) and write stories to fit the open sentence.					

Outcome 1G: Understand simple decimal fractions in relation to money

Grade Level Content Expectations (GLCEs)	Michigan Benchmarks	Teaching the Faith Activities
N.ME.03.21 Understand and relate decimal fractions to fractional parts of a dollar, e.g., 1/2 dollar = $0.50; 1/4 dollar = $0.25.*	IV.1.2. Investigate and develop an understanding of the base-10 place-value system. V.2.1. Write and solve open sentences (e.g., à + D = 5) and write stories to fit the open sentence.	▪ Set up "stores" where the students can purchase items with play money or serve as clerks who need to make change for purchases. Point out that the customer receives a product and change equal to the original amount value of the money he paid. Point out that this is not the way God works. We do not purchase forgiveness or blessings. And though we give offerings as a response of joy and thanksgiving, God always gives us much more than we could ever return to Him. (Luke 6:38 and Psalm 23:5)

Michigan District Lutheran School Curriculum *TEACHER ACCOUNTABILITY RECORD*

1G: Understand simple decimal fractions in relation to money. **Teacher Name: _____** **Grade Level: 3**	**Curricular Area: Mathematics /Unit 1-Number and Operations** **School Year:**				
Michigan Standards, *Benchmark*, or GLCE (The *italicized* indicates the one used)	**Dates Taught (month/day/initials):**				
IV.1.2. Investigate and develop an understanding of the base-10 place-value system.					
V.2.1. Write and solve open sentences (e.g., à + D = 5) and write stories to fit the open sentence.					

Michigan District Lutheran School Curriculum *OUTCOMES*

Curricular Area: Mathematics Grade 3 – Measurement

Outcome 2A: Measure and use units for length, weight, temperature, and time.

Grade Level Content Expectations (GLCEs)	Michigan Benchmarks	Teaching the Faith Activities
M.UN.03.01 Know and use common units of measurements in length, weight, and time. M.UN.03.02 Measure in mixed units within the same measurement system for length, weight, and time: feet and inches, meters and centimeters, kilograms and grams, pounds and ounces, liters and milliliters, hours and minutes, minutes and seconds, years and months. M.UN.03.03 Understand relationships between sizes of standard units, e.g., feet and inches, meters and centimeters. M.UN.03.04 Know benchmark temperatures such as freezing (32ºF, 0ºC); boiling (212ºF, 100ºC); and compare temperatures to these, e.g., cooler, warmer.	II.3.1. Compare attributes of objects; develop standard units of measurement; and select and use standard tools for measurement. II.3.2. Identify the attribute to be measured and select the appropriate unit of measurement for length, mass (weight), area, perimeter, capacity, time, temperature and money.	▪ Have students keep track of their daily activities for a week. Find out how much time they spend in school, watching TV, sleeping, playing games, eating, and in church or Sunday school. Do not ask how much time is devoted to God. Instead, remind the children that as God's forgiven people we want God to be part of all that we do. ▪ We are wonderfully made by God, our Creator and Preserver. Have each student explore the uniqueness of himself or herself as an object of God's creative work. Involve students in measuring their height with a tracing of their foot, or by making a mark on a growth chart, using their hands as the unit of measurement. Then have students measure their feet and hands by inches or centimeters, make the proper calculations on a calculator, and determine their height.

Michigan District Lutheran School Curriculum *TEACHER ACCOUNTABILITY RECORD*

2 A: Measure and use units for length, weight, temperature, and time. **Teacher Name: _____** **Grade Level: 3**	**Curricular Area: Mathematics /Unit 2-Measurement** **School Year:**				
Michigan Standards, *Benchmark*, or GLCE (The *italicized* indicates the one used)	**Dates Taught (month/day/initials):**				
II.3.1. Compare attributes of objects; develop standard units of measurement; and select and use standard tools for measurement					
II.3.2. Identify the attribute to be measured and select the appropriate unit of measurement for length, mass (weight), area, perimeter, capacity, time, temperature and money.					

Outcome 2B: Understand meaning of area and perimeter and apply problems.

Grade Level Content Expectations (GLCEs)	Michigan Benchmarks	Teaching the Faith Activities
M.UN.03.05 Know the definition of area and perimeter and calculate the perimeter of a square and rectangle given whole number side lengths. M.UN.03.06 Use square units in calculating area by covering the region and counting the number of square units. M.UN.03.07 Distinguish between units of length and area and choose a unit appropriate in the context. M.UN.03.08 Visualize and describe the relative sizes of one square inch and one square centimeter.	II.3.2. Identify the attribute to be measured and select the appropriate unit of measurement for length, mass (weight), area, perimeter, capacity, time, temperature and money. II.3.3. Develop strategies for estimating measures and compare the estimates to the results of the measurement; decide if an estimate is "a good estimate."	▪ Refer to the Bible narratives about the building of the ark and the building of the tabernacle. Determine the perimeters or areas of each in cubits, then in meters, then in feet.

Michigan District Lutheran School Curriculum *TEACHER ACCOUNTABILITY RECORD*

2B: Understand meaning of area and perimeter and apply in problems. **Teacher Name: _____** **Grade Level: 3**	**Curricular Area: Mathematics /Unit 2-Measurement** **School Year:**				
Michigan Standards, *Benchmark*, or GLCE (The *italicized* indicates the one used)	**Dates Taught (month/day/initials):**				
II.3.2. Identify the attribute to be measured and select the appropriate unit of measurement for length, mass (weight), area, perimeter, capacity, time, temperature and money.					
II.3.3. Develop strategies for estimating measures and compare the estimates to the results of the measurement; decide if an estimate is "a good estimate."					

Outcome 2C: Estimate perimeter and area.

Grade Level Content Expectations (GLCEs)	Michigan Benchmarks	Teaching the Faith Activities
M.TE.03.09 Estimate the perimeter of a square and rectangle in inches and centimeters; estimate the area of a square and rectangle in square inches and square centimeters.	II.3.3. Develop strategies for estimating measures and compare the estimates to the results of the measurement; decide if an estimate is "a good estimate."	

Michigan District Lutheran School Curriculum *TEACHER ACCOUNTABILITY RECORD*

2C: Estimate perimeter and area. **Teacher Name: _____** **Grade Level: 3**	**Curricular Area: Mathematics /Unit 2-Measurement** **School Year:**			
Michigan Standards, *Benchmark*, or GLCE (The *italicized* indicates the one used)	**Dates Taught (month/day/initials):**			
II.3.3. Develop strategies for estimating measures and compare the estimates to the results of the measurement; decide if an estimate is "a good estimate."				

Outcome 2D: Solve measurement problems.

Grade Level Content Expectations (GLCEs)	Michigan Benchmarks	Teaching the Faith Activities
M.PS.03.10 Add and subtract lengths, weights, and times using mixed units within the same measurement system. M.PS.03.11 Add and subtract money in dollars and cents. M.PS.03.12 Solve applied problems involving money, length, and time. M.PS.03.13 Solve contextual problems about perimeters of rectangles and areas of rectangular regions.	II.3. 6. Apply measurement to describe the real world and to solve problems. II.1. 7. Use shape, shape properties and shape relationships to describe the physical world and to solve problems.	▪ Using the length of church pews, perimeter of the church building, width of hymnals, etc., have students convert the measurements to other units.

Michigan District Lutheran School Curriculum *TEACHER ACCOUNTABILITY RECORD*

2D: Solve measurement problems. **Teacher Name: _____** **Grade Level: 3**	**Curricular Area: Mathematics /Unit 2-Measurement** **School Year:**				
Michigan Standards, *Benchmark*, or GLCE (The *italicized* indicates the one used)	**Dates Taught (month/day/initials):**				
II.3. 6. Apply measurement to describe the real world and to solve problems.					
II.1. 7. Use shape, shape properties and shape relationships to describe the physical world and to solve problems.					

Michigan District Lutheran School Curriculum *OUTCOMES*

Curricular Area: Mathematics Grade 3 - Geometry

Outcome 3A: Recognize the basic elements of geometric objects.

Grade Level Content Expectations (GLCEs)	**Michigan Benchmarks**	**Teaching the Faith Activities**
G.GS.03.01 Identify points, line segments, lines, and distance. G.GS.03.02 Identify perpendicular lines and parallel lines in familiar shapes and in the classroom. G.GS.03.03 Identify parallel faces of rectangular prisms in familiar shapes and in the classroom.	II.1.1. Recognize and name familiar shapes in one, two and three dimensions such as lines, rectangles and spheres and informally discuss the shape of a graph. II.1.6. Recognize parallel and perpendicular line segments and figures that have similarity and/or congruence. II.1.7. Use shape, shape properties and shape relationships to describe the physical world and to solve problems.	

Michigan District Lutheran School Curriculum *TEACHER ACCOUNTABILITY RECORD*

3A: Recognize the basic elements of geometric objects. **Teacher Name: _____** **Grade Level: 3**	**Curricular Area: Mathematics/Unit 3-Geometry** **School Year:**				
Michigan Standards, *Benchmark*, or GLCE (The *italicized* indicates the one used)	**Dates Taught (month/day/initials):**				
II.1.1. Recognize and name familiar shapes in one, two and three dimensions such as lines, rectangles and spheres and informally discuss the shape of a graph.					
II.1.6. Recognize parallel and perpendicular line segments and figures that have similarity and/or congruence					
II.1.7. Use shape, shape properties and shape relationships to describe the physical world and to solve problems.					

Outcome 3B: Name and explore properties of shapes.

Grade Level Content Expectations (GLCEs)	Michigan Benchmarks	Teaching the Faith Activities
G.GS.03.04 Identify, describe, compare, and classify two-dimensional shapes, e.g., parallelogram, trapezoid, circle, rectangle, square, and rhombus, based on their component parts (angles, sides, vertices, line segment) and on the number of sides and vertices. G.SR.03.05 Compose and decompose triangles and rectangles to form other familiar two-dimensional shapes, e.g., form a rectangle using two congruent right triangles, or decompose a parallelogram into a rectangle and two right triangles.	II.1.1. Recognize and name familiar shapes in one, two and three dimensions such as lines, rectangles and spheres and informally discuss the shape of a graph. II.1.2. Describe the attributes of familiar shapes. II.1.3. Compare, sort and classify familiar shapes. II.1.4. Draw and build familiar shapes. II.1.5. Explore ways to combine, dissect and transform shapes. II.1. 7. Use shape, shape properties and shape relationships to describe the physical world and to solve problems.	▪ Use Christian symbols, such as the cross or the fish, to demonstrate side-to-side or top-to-bottom symmetry. Students could draw symbols that are congruent with a baptismal shell patterns or patterns of Pentecost flames.

Michigan District Lutheran School Curriculum *TEACHER ACCOUNTABILITY RECORD*

3B: Name and explore properties of shapes. **Teacher Name: _____** **Grade Level: 3**	**Curricular Area: Mathematics/Unit 3-Geometry** **School Year:**				
Michigan Standards, *Benchmark*, or GLCE (The *italicized* indicates the one used)	**Dates Taught (month/day/initials):**				
II.1.1. Recognize and name familiar shapes in one, two and three dimensions such as lines, rectangles and spheres and informally discuss the shape of a graph.					
II.1.2. Describe the attributes of familiar shapes.					
II.1.3. Compare, sort and classify familiar shapes.					
II.1.4. Draw and build familiar shapes.					
II.1.5. Explore ways to combine, dissect and transform shapes.					
II.1. 7. Use shape, shape properties and shape relationships to describe the physical world and to solve problems.					

Outcome 3C: Explore and name three-dimensional solids.

Grade Level Content Expectations (GLCEs)	Michigan Benchmarks	Teaching the Faith Activities
G.GS.03.06 Identify, describe, build, and classify familiar three-dimensional solids, e.g., cube, rectangular prism, sphere, pyramid, cone, based on their component parts (faces, surfaces, bases, edges, vertices). G.SR.03.07 Represent front, top, and side views of solids built with cubes.	II.1. 1. Recognize and name familiar shapes in one, two and three dimensions such as lines, rectangles and spheres and informally discuss the shape of a graph. II.1. 2. Describe the attributes of familiar shapes. II.1. 3. Compare, sort and classify familiar shapes. II.1.4. Draw and build familiar shapes. II.1. 5. Explore ways to combine, dissect and transform shapes. II.1. 7. Use shape, shape properties and shape relationships to describe the physical world and to solve problems.	▪ As a class project, have students make cubes of a specified size and use these to construct a replica of the altar or other objects in your church.

Michigan District Lutheran School Curriculum *TEACHER ACCOUNTABILITY RECORD*

3C: Explore and name three-dimensional solids. **Teacher Name: _____** **Grade Level: 3**	**Curricular Area: Mathematics/Unit 3-Geometry** **School Year:**				
Michigan Standards, *Benchmark*, or GLCE (The *italicized* indicates the one used)	**Dates Taught (month/day/initials):**				
II.1. 1. Recognize and name familiar shapes in one, two and three dimensions such as lines, rectangles and spheres and informally discuss the shape of a graph.					
II.1. 2. Describe the attributes of familiar shapes.					
II.1. 3. Compare, sort and classify familiar shapes.					
II.1.4. Draw and build familiar shapes.					
II.1. 5. Explore ways to combine, dissect and transform shapes.					
II.1. 7. Use shape, shape properties and shape relationships to describe the physical world and to solve problems.					

Michigan District Lutheran School Curriculum *OUTCOMES*

Curricular Area: Mathematics Grade 3 – Data and Probability

Outcome 4A: Use bar graphs.

Grade Level Content Expectations (GLCEs)	**Michigan Benchmarks**	**Teaching the Faith Activities**
D.RE.03.01 Read and interpret bar graphs in both horizontal and vertical forms. D.RE.03.02 Read scales on the axes and identify the maximum, minimum, and range of values in a bar graph. D.RE.03.03 Solve problems using information in bar graphs, including comparison of bar graphs.	III.2.1. Read and explain data they have collected and organized themselves and progress to reading data from other sources. III.2.2. Describe the shape of the data using informal language. III.2.3. Draw, explain and justify conclusions, such as trends based on data.	▪ Collect data about the months of the students' Baptism birthdays or the size of Sunday school classes. From the information make a frequency chart and a graph. ▪ Have students discover the design of a Christian symbol by using the coordinates you give them. Or have students write the coordinates for a friend to find. Symbols that might work well include the cross, baptismal shell, the Trinity circles and triangles, the symbols for Christ, for Christ and the fish. Expand this to a language arts activity that involves researching and writing what each symbol means.

Michigan District Lutheran School Curriculum *TEACHER ACCOUNTABILITY RECORD*

4A: Use bar graphs. **Teacher Name: _____** **Grade Level: 3**	**Curricular Area: Mathematics/Unit 4-Data and Probability** **School Year:**				
Standards Benchmark or GLCE (The *italicized* indicates the one used)	**Dates Taught (month/day/initials):**				
III.2.1. Read and explain data they have collected and organized themselves and progress to reading data from other sources.					
III.2.2. Describe the shape of the data using informal language.					
III.2.3. Draw, explain and justify conclusions, such as trends based on data.					