



Archdiocese of Newark Catholic Schools

Curriculum Mapping

Curriculum mapping is a process that helps schools and districts/dioceses determine the “agreed-upon” learning for all students. Curriculum mapping was undertaken in the Archdiocese of Newark in order to ensure that a consistent, clearly articulated curriculum infused with Gospel values is being provided to all students in our schools. The curriculum maps for the Catholic schools of the Archdiocese of Newark identify the content to be taught and skills to be mastered at each grade level.

The expertise and experience of the educators within our schools is the main source for determining the content and skills students will be expected to master. The Archdiocesan curriculum maps are developed through a collaborative process which involves individual teacher contributions, small group sessions and larger group meetings. Relevant educational standards, including those proposed by content area experts, the New Jersey Core Curriculum Content Standards, and the Common Core State Standards, are used as a resource in the curriculum mapping process. The resulting consensus maps reflect the collective thinking of classroom teachers based on their observation of student learning and their knowledge of educational practice and research. The Archdiocesan curriculum maps include teacher generated ideas for the infusion of Gospel values and faith connection activities.

While the curriculum maps clearly articulate the expected learning for all students, individual teachers have the flexibility to teach the content and skills in their own manner by:

- ◆ utilizing their own particular strengths and teaching style
- ◆ addressing the varying learning needs of their students
- ◆ determining the order in which the content and skills are presented within a marking period
- ◆ including additional content and skills once students have met the learning expectations identified in the curriculum map

Administrators at all levels will maintain the responsibility to ensure that teachers are following the curriculum maps and that appropriate teaching is being conducted. This will be done through a combination of classroom observations, faculty meetings, professional development opportunities and teacher evaluations, as well as by using various measurement tools, including but not limited to in-class and standardized testing. The Archdiocesan curriculum maps will help ensure the academic excellence that is integral to the mission of our Catholic schools and will provide educators and parents with a clear understanding of the learning expectations at each grade level.

**Archdiocese of Newark Catholic Schools
Curriculum Map for Mathematics
Kindergarten**

First Trimester: September-November

Standards	Content	Skills	Assessment	Gospel Values & Faith Connections
<p>K.CC.3 Recognize and write numerals from 0 to 20. Represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects).</p> <p>K.CC.6 Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group, by using matching and counting strategies.</p> <p>K.CC.7 Compare two numbers between 1 and 10 presented as written numerals.</p> <p>K.CC.4 Demonstrate an understanding of the relationship between numbers and quantities; connect counting to cardinality.</p> <p style="padding-left: 20px;">a. When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object.</p> <p>K.MD.S4 Use tally marks to record data.</p> <p>K.MD.S5. Represent data using concrete objects, pictures, and graphs</p>	<p>Number Sense</p>	<p>Write numbers 0 – 9 using correct formation.</p> <p>Compare numbers 1 through 10.</p> <p>Compare sets of objects using “greater than”, “less than”, and equal”.</p> <p>Represent numbers using different strategies (tally, pictures, etc.)</p>	<p>Student learning will be assessed on a continual basis using various types of formal and informal assessments. A list of possible assessment methods is provided below:</p> <p>Pretest/Posttest</p> <p>Class discussion</p> <p>Observation</p> <p>Checklists</p> <p>Unit tests</p> <p>Chapter tests</p> <p>Projects</p> <p>Homework</p> <p>Journal</p> <p>Portfolio</p> <p>Demonstration</p> <p>Class work</p> <p>Online Math programs</p> <p>Benchmark Tests</p>	<p>Gospel values should be evident in the classroom environment and referenced and reinforced throughout the curriculum.</p> <p>Gospel Values</p> <p>Community</p> <p>Compassion</p> <p>Faith in God</p> <p>Forgiveness</p> <p>Hope</p> <p>Justice</p> <p>Love</p> <p>Peace</p> <p>Respect For Life</p> <p>Service</p> <p>Simplicity</p> <p>Truth</p> <p>Included in this column are suggestions for making faith connections within the Math classroom. These suggestions were submitted by teachers.</p>

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Kindergarten**

First Trimester: September-November

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<p>K.CC.S4 Use ordinal numbers to identify first (1st) through fifth (5th) position.</p> <p>K.CC.1 Count to 100 by ones and by tens.</p> <p>K.CC.2 Count forward beginning from a given number within the known sequence (instead of having to begin at 1).</p> <p>K.CC.S1 Identify missing numbers on a number line up to 10.</p> <p>K.CC.S2 Count backward from 10.</p> <p>K.OA.S3 Identify, reproduce, describe, extend, and create color, rhythmic, shape, number, and letter repeating patterns with simple attributes (e.g., ABABAB...)</p> <p>K.OA.S4. Identify a missing element in a given pattern.</p>	<p>Patterns</p>	<p>Use and model ordinal numbers to 10th.</p> <p>Count to 31.</p> <p>Count forward beginning from a given number.</p> <p>State the missing number from a number line.</p> <p>Count backward from 10.</p> <p>Identify and extend color, rhythmic, shape, number, and letter patterns.</p> <p>Create and represent color, rhythmic, shape, number, and letter patterns.</p> <p>Determine a missing element in a given pattern.</p>	<p>Rubrics</p> <p>Conferencing</p> <p>Exit slips/ “Do Now” Tasks</p> <p>Problem of the Day</p> <p>Individual Response System</p>	<p>Use the 10 Commandments when identifying numbers 1-10, number sequence, odd and even, ordinal numbers, etc.</p> <p>Ordinal Numbers- Days of Creation</p> <p>Students can create a counting book using familiar bible stories. For each page of the book, students can name or draw characters or important details from the bible. For instance, the page for 3 can have the Holy Trinity because it is the Father, the Son, and the Holy Spirit; 7 can have the number of days of creation; 12 can have all of the Apostles.</p> <p>During the month of October use the Rosary to help children to count and make relationships between numbers and quantities.</p>

**Archdiocese of Newark Catholic Schools
Curriculum Map for Mathematics
Kindergarten**

Second Trimester: December-February

Standards	Content	Skills	Assessment	Gospel Values & Faith Connections
<p>K.CC.3 Recognize and write numerals from 0 to 20. Represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects).</p> <p>K.CC.6 Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group, by using matching and counting strategies.</p> <p>K.CC.5a. Count to answer “how many?” questions about:</p> <ul style="list-style-type: none"> ○ as many as 20 things arranged in a line, a rectangular array, or a circle, ○ as many as 10 things in a scattered configuration <p>K.CC.5b Count out a requested number of objects from 1-20.</p> <p>K.NBT.1 Compose and decompose numbers from 11 to 19 into ten ones and some further ones (e.g., by using objects or drawings, and record each composition or decomposition by a drawing or equation such as, $18 = 10 + 8$); understand that these</p>	<p>Number Sense</p>	<p>Recognize and write numbers 10 through 20.</p> <p>Compare numerals up to 20 using greater than, less than, and equal to.</p> <p>Represent numbers up to 20.</p> <p>Identify place value of ones and tens.</p> <p>Read and recognize number words zero through ten.</p> <p>Connect number words zero through ten to the numeral they name.</p> <p>Skip count by 5s and 10s.</p>	<p>Student learning will be assessed on a continual basis using various types of formal and informal assessments. A list of possible assessment methods is provided below:</p> <p>Pretest/Posttest</p> <p>Class discussion</p> <p>Observation</p> <p>Checklists</p> <p>Unit tests</p> <p>Chapter tests</p> <p>Projects</p> <p>Homework</p> <p>Journal</p> <p>Portfolio</p> <p>Demonstration</p> <p>Class work</p> <p>Online Math programs</p> <p>Benchmark Tests</p>	<p>Gospel values should be evident in the classroom environment and referenced and reinforced throughout the curriculum.</p> <p>Gospel Values</p> <p>Community</p> <p>Compassion</p> <p>Faith in God</p> <p>Forgiveness</p> <p>Hope</p> <p>Justice</p> <p>Love</p> <p>Peace</p> <p>Respect For Life</p> <p>Service</p> <p>Simplicity</p> <p>Truth</p> <p>Included in this column are suggestions for making faith connections within the Math classroom. These suggestions were submitted by teachers</p>

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Kindergarten**

Second Trimester: December-February

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<p>numbers are composed of a group of ten ones and one, two, three, four, five, six, seven, eight or nine ones.</p> <p>K.CC.S3 Connect number words and numerals to 20.</p> <p>K.CC.1 Count to 100 by ones and by tens</p> <p>K.G.S1 Identify a whole divided into equal parts (e.g., halves, thirds, fourths).</p> <p>K.G.S2 Explore symmetry in shapes and pictured objects.</p> <p>K.MD.S3 Pose questions and gather data about themselves and their surroundings.</p> <p>K.MD S4 Use tally marks to record data.</p> <p>K.MD S5 Represent data using concrete objects, pictures, and graphs.</p> <p>K.MD S6 Interpret displays of data presented in tables, pictographs and bar graphs.</p>	<p>Fractional parts</p> <p>Graphing</p>	<p>Recognize and explore fractions as part of a whole.</p> <p>Recognize and construct lines of symmetry.</p> <p>Collect and record data.</p> <p>Create graphs: line, bar, picture, pictograph.</p> <p>Interpret data presented in graphs.</p>	<p>Rubrics</p> <p>Conferencing</p> <p>Exit slips/ “Do Now”</p> <p>Tasks</p> <p>Problem of the Day</p> <p>Individual Response System</p>	<p>Numbers in the Bible - Noah’s Ark 40 days; 12 apostles; 150 Psalms, etc.</p> <p>Counting backwards: from the beginning of Advent to Christmas</p> <p>Use the Rosary to help in the development of counting by 10's.</p> <p>Fractions- Equal Parts- Fairness, Sharing, Kindness</p> <p>Symmetry-Use the butterfly to show a symmetry in God’s creation</p> <p>Students can work collaboratively to tally the foods donated to the food pantry. Separate the food collected into three piles boxes, cans, and bags. Generate a bar graph from the tally chart and interpret and explain the data.</p>

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Second Trimester: December-February

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<p>K.G.2 Correctly name shapes regardless of their orientations or overall size.</p> <p>K.G.3 Identify shapes as two-dimensional (lying in a plane, “flat”) or three-dimensional (“solid”).</p> <p>K.G.4 Analyze and compare two- and three-dimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, parts (e.g., number of sides and vertices/“corners”) and other attributes (e.g., having sides of equal length).</p> <p>K.G.5 Model shapes in the world by building shapes from components (e.g., sticks and clay, balls) and drawing shapes.</p> <p>K.G.6 Compose simple shapes to form larger shapes. Example: “Can you join these two triangles with full sides touching to make a rectangle?”</p>	<p>Shapes</p>	<p>Distinguish between 2D and 3D shapes.</p> <p>Recognize and name shapes: cone, cube, cylinder, sphere, pyramid, prism.</p> <p>Describe shapes by their attributes.</p> <p>Compare and contrast attributes of shapes.</p> <p>Combine simple shapes to form larger shapes.</p> <p>Identify shapes in real world objects.</p>		<p>Shapes- Identify shapes within the Church and shapes related to our faith. Examples: Triangle-Trinity; Circle- Host</p> <p>Attributes: When using attributes blocks to form pictures, discuss the importance of each piece being needed to complete the picture just as each of us is special to Jesus and an important part of our family, class, Church, etc.</p>

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Kindergarten**

Second Trimester: December-February

Standards	Content	Skills	Assessment	Gospel Values & Faith Connections
<p>K.OA.1 Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g., claps) acting out situations, verbal explanations, expressions, or equations.</p> <p>K.OA.2 Solve addition and subtraction word problems, and add and subtract within 10, (e.g., by using objects or drawings to represent the problem).</p>	<p>Addition & Subtraction</p>	<p>Describe and represent addition as joining of two groups.</p> <p>Understand and represent subtraction as taking apart and taking from the whole.</p>		<p>Write addition & subtraction story problems that include the values of kindness and sharing. (Example: Bill brings in 4 cans of soup for the food drive. Nina brings in 2 cans. How many cans did they bring in? Discuss: Why should we bring in food for the poor?</p>

**Archdiocese of Newark Catholic Schools
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Kindergarten**

Third Trimester: March-June

Standards	Content	Skills	Assessment	Gospel Values & Faith Connections
<p>K.MD.S1 Compare and order lengths and heights (e.g., using shortest/longest, shortest/tallest).</p> <p>K.MD.S2 Use non-standard units close in size to standard units to estimate measure.</p> <p>K.MD.S9 Identify hot and cold temperatures on a thermometer.</p> <p>K.MD.S8 Tell time to the hour on an analog and digital clock.</p>	<p>Time</p>	<p>Use non-standard units to estimate measure.</p> <p>Identify hot and cold temperatures on a thermometer.</p> <p>Identify parts of a clock.</p> <p>Track and compare the amount of time various events take.</p> <p>Tell time hourly on digital and analog clocks.</p> <p>Compare analog clocks to digital clocks.</p> <p>Relate activities to the time of day or night.</p>	<p>Rubrics</p> <p>Conferencing</p> <p>Exit slips/ “Do Now” Tasks</p> <p>Problem of the Day</p> <p>Individual Response System</p>	<p>Measurement: Track student height and discuss the wonder of growth.</p>

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Third Trimester: March-June

Standards	Content	Skills	Assessment	Gospel Values & Faith Connections
<p>K.MD.S10 Identify U.S. coins and recognize the value associated with each type of coin: penny, nickel, dime, quarter.</p> <p>K.MD.S11 Determine the value of a group of coins (e.g., “count on” from a nickel, dime or quarter).</p> <p>K.MD.S12 Compare the value of two groups of coins.</p> <p>K.OA.S1 Add and subtract money amounts up to 9¢.</p>	<p>Money</p>	<p>Identify coins and their value: penny, nickel, dime, quarter.</p> <p>Match and compare sets of coins.</p> <p>Add and subtract money up to 10¢.</p>		<p>General- Incorporate activities that require students to share and work together.</p>
<p>K.OA.1 Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g., claps) acting out situations, verbal explanations, expressions, or equations.</p> <p>K.OA.2 Solve addition and subtraction word problems, and add and subtract within 10, (e.g., by using objects or drawings to represent the problem).</p>	<p>Addition & Subtraction</p>	<p>Represent addition problems in multiple ways.</p> <p>Create and solve story problems.</p> <p>Fluently add numbers to 10.</p> <p>Represent addition using a number sentence.</p>		

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Third Trimester: March-June

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<p>K.OA.3 Decompose numbers less than or equal to 10 into pairs in more than one way, (e.g., by using objects or drawings, and record each decomposition by a drawing or equation such as, $5 = 2 + 3$ and $5 = 4 + 1$).</p> <p>K.OA.4 For any number from 1 to 9, find the number that makes 10 when added to the given number, (e.g., by using objects or drawings, and record the answer with a drawing or equation.)</p> <p>K.OA.5 Fluently add and subtract within 5.</p> <p>K.NBT.1 Compose and decompose numbers from 11 to 19 into ten ones and some further ones (e.g., by using objects or drawings, and record each composition or decomposition by a drawing or equation such as, $18 = 10 + 8$); understand that these numbers are composed of a group of ten ones and one, two, three, four, five, six, seven, eight or nine ones.</p>		<p>Identify a missing addend.</p> <p>Decompose (break down into addends) numbers up to 10.</p> <p>Understand and represent subtraction as taking apart and taking from the whole.</p> <p>Represent subtraction using a number sentence.</p> <p>Create and solve story problems involving addition and subtraction.</p>		