

Catholic Identity: Integration of Our Faith

- 2.1A display a sense of wonder about mathematical relationships *
- 2.1B respond to the beauty, harmony, proportion, radiance, and wholeness present in mathematics *
- 2.1C show interest in how the mental processes evident within mathematics help us with the development of natural virtues *
- 2.1D exhibit appreciation for the process of discovering meanings and truths and not just arriving at an answer *

Mathematical Learning Process Standards

2.2 Learning Process Standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding, demonstrating the mental habits of precise, determined, careful, and accurate questioning, inquiry, and reasoning. *

Tools to Know		Ways to Show	
2.2A	apply mathematics to problems arising in everyday life, society, and the workplace	2.2D	create and use representations to organize, record, and communicate mathematical ideas
2.2B	use a problem-solving model that incorporates analyzing given information, formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution	2.2E	analyze mathematical relationships to connect and communicate mathematical ideas
2.2C	exhibit joy at solving difficult mathematical problems and operations*	2.2F	develop lines of inquiry (as developmentally appropriate) to understand why things are true and why they are false*

Place Value and Comparing Numbers

2.3 Number and operations. The student understands how to represent and compare whole numbers, the relative position and magnitude of whole numbers, and relationships within the numeration system related to place value.

Applied Standards		Supporting Standards	
2.3A	use place value to compare and order whole numbers up to 1,200 using comparative language, numbers, and symbols (>, <, or =)	2.3A.1	use concrete and pictorial models to compose and decompose numbers up to 1,200 in more than one way as a sum of so many thousands, hundreds, tens, and ones
2.3B	use standard, word, and expanded forms to represent numbers up to 1,200	2.3B.1	use a number line to locate a position of a given whole number or name the whole number that corresponds to a specific point.
		2.3B.2	determine whether a number up to 40 is even or odd using pairings of objects to represent the number

Whole Number Operations

2.4 Number and operations. The student develops and use strategies and methods for whole number computations in order to solve addition and subtraction problems with efficiency and accuracy and connects repeated addition and subtraction to multiplication and division situations that involve equal groupings and shares.

2.4A	solve one-step and two-step word problems and number sentences with unknown terms involving addition and subtraction within 1,000	2.4A.1	recall basic facts to add and subtract within 20 with automaticity
		2.4A.2	add up to four two-digit numbers and subtract two-digit numbers using mental strategies and algorithms based on knowledge of place value and properties of operations
2.4B	determine the value of a collection of coins up to one dollar	2.4B.1	use the cent symbol, dollar sign, and the decimal point to name the value of a collection of coins
2.4C	solve one-step contextual problems involving multiplication and division	2.4C.1	model, create, and describe contextual multiplication situations in which equivalent sets of concrete objects are joined
		2.4C.2	model, create, and describe contextual division situations in which a set of concrete objects is separated into equivalent sets

Fractions		
2.4	Number and operations. The student recognizes and represents fractional units and communicates how they are used to name parts of a whole.	
2.4D	explain that the more fractional parts used to make a whole, the smaller the part; and the fewer the fractional parts, the larger the part	2.4D.1 partition objects into equal parts and name the parts, including halves, fourths, and eighths, using words 2.4D.2 use concrete models to count fractional parts beyond one whole using words and recognize how many parts it takes to equal one whole
Geometry		
2.6	Geometry and measurement. The student analyzes attributes of two-dimensional shapes and three-dimensional solids to develop generalizations about their properties.	
2.6A	classify and sort polygons with 12 or fewer sides according to attributes, including identifying the number of sides and number of vertices	2.6A.1 create two-dimensional shapes based on given attributes, including number of sides and vertices 2.6A.2 compose and decompose two-dimensional shapes with given properties or attributes
2.6B	classify and sort three-dimensional solids, including spheres, cones, cylinders, rectangular prisms (including cubes as special rectangular prisms), pyramids, and triangular prisms, based on attributes using formal geometric language	2.6B.1 compose three-dimensional solids with given properties or attributes
Measurement		
2.6	Geometry and measurement. The student selects and uses units to describe length, area, and time.	
2.6C	determine a solution to a problem involving length, including estimating lengths	2.6C.1 find the length of objects using concrete models for standard units of length 2.6C.2 determine the length of an object to the nearest marked unit using rulers, yardsticks, meter sticks, or measuring tapes
2.6D	use concrete models of square units to find the area of a rectangle by covering it with no gaps or overlaps, counting to find the total number of square units, and describing the measurement using a number and the unit	
2.6E	read and write time to the nearest one-minute increment using analog and digital clocks and distinguish between a.m. and p.m.	
Using Data to Solve Problems		
2.7	Data analysis. The student organizes data to make it useful for interpreting information and solving problems.	
2.7A	write and solve one-step word problems involving addition or subtraction using data represented within pictographs and bar graphs with intervals of one or more	2.7A.1 draw conclusions and make predictions from information in a graph 2.7A.2 explain that the length of a bar in a bar graph or the number of pictures in a pictograph represents the number of data points for a given category 2.7A.3 organize a collection of data with up to four categories using pictographs and bar graphs with intervals of one or more