

Catholic Identity Standards

K.0 The student understands and integrates the content of what is learned into their faith and daily life.

- K.0A recognize that every human life is sacred because each person is created and loved by God
- K.0B describe ways to take part in/be responsible to the community by discerning and using our God-given gifts
- K.0C recognize and oppose unjust social structures and work toward justice for all
- K.0D see God at work in all things and as expressed in the sacraments
- K.0E connect scripture, tradition, and the models of Mary and the saints to guide, grow, and deepen faith

Mathematical Process Standards

K.1 The student uses mathematical processes to acquire and demonstrate mathematical understanding.

- K.1A apply mathematics to problems arising in everyday life, society, and the workplace
- K.1B 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
- K.1C select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems
- K.1D communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate
- K.1E create and use representations to organize, record, and communicate mathematical ideas
- K.1F analyze mathematical relationships to connect and communicate mathematical ideas
- K.1G display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication
- K.GS2* develop lines of inquiry (as developmentally appropriate) to understand why things are true and why they are false
- K.GS3* recognize the power of the human mind as both a gift from God and a reflection of Him in whose image and likeness we are made
- K.GS4* survey the truths about mathematical objects that are interesting in their own right and independent of human opinions
- K.DS1* display a sense of wonder about mathematical relationships as well as confidence in mathematical certitude
- K.DS2* respond to the beauty, harmony, proportion, radiance, and wholeness present in mathematics
- K.DS3* show interest in the pursuit of understanding for its own sake
- K.DS4* exhibit joy at solving difficult mathematical problems and operations

Number and Operations

K.2 The student applies mathematical process standards to understand how to represent and compare whole numbers, the relative position and magnitude of whole numbers, and relationships within the numeration system.

- K.2A count forward and backward to at least 20 with and without objects
- K.2B read, write, and represent whole numbers from 0 to at least 20 with and without objects or pictures
- K.2C count a set of objects up to at least 20 and demonstrate that the last number said tells the number of objects in the set regardless of their arrangement or order
- K.2D recognize instantly the quantity of a small group of objects in organized and random arrangements
- K.2E generate a set using concrete and pictorial models that represents a number that is more than, less than, and equal to a given number up to 20
- K.2F generate a number that is one more than or one less than another number up to at least 20
- K.2G compare sets of objects up to at least 20 in each set using comparative language
- K.2H use comparative language to describe two numbers up to 20 presented as written numerals
- K.2I compose and decompose numbers up to 10 with objects and pictures

Number and Operations

K.3 The student applies mathematical process standards to develop an understanding of addition and subtraction situations in order to solve problems.

- K.3A model the action of joining to represent addition and the action of separating to represent subtraction
- K.3B solve word problems using objects and drawings to find sums up to 10 and differences within 10
- K.3C explain the strategies used to solve problems involving adding and subtracting within 10 using spoken words, concrete and pictorial models, and number sentences

Number and Operations

K.4 The student applies mathematical process standards to identify coins in order to recognize the need for monetary transactions.

- K.4A identify U.S. coins by name, including pennies, nickels, dimes, and quarters

Algebraic Reasoning

K.5 The student applies mathematical process standards to identify the pattern in the number word list.

- K.5A recite numbers up to at least 100 by ones and tens beginning with any given number

Geometry and Measurement

K.6 The student applies mathematical process standards to analyze attributes of two-dimensional shapes and three-dimensional solids to develop generalizations about their properties.

K.6A	identify two-dimensional shapes, including circles, triangles, rectangles, and squares as special rectangles
K.6B	identify three-dimensional solids, including cylinders, cones, spheres, and cubes, in the real world
K.6C	identify two-dimensional components of three-dimensional objects
K.6D	identify attributes of two-dimensional shapes using informal and formal geometric language interchangeably
K.6E	classify and sort a variety of regular and irregular two- and three-dimensional figures regardless of orientation or size
K.6F	create two-dimensional shapes using a variety of materials and drawings

Geometry and Measurement

K.7 The student applies mathematical process standards to directly compare measurable attributes.

K.7A	give an example of a measurable attribute of a given object, including length, capacity, and weight
K.7B	compare two objects with a common measurable attribute to see which object has more of/less of the attribute and describe the difference

Data Analysis

K.8 The student applies mathematical process standards to collect and organize data to make it useful for interpreting information.

K.GS1* demonstrate the mental habits of precise, determined, careful, and accurate questioning, inquiry, and reasoning

K.8A	collect, sort, and organize data into two or three categories
K.8B	use data to create real-object and picture graphs
K.8C	draw conclusions from real-object and picture graphs

Personal Financial Literacy

K.9 The student applies mathematical process standards to manage one's financial resources effectively for lifetime financial security.

K.DS5* show interest in how the mental processes evident within the discipline of mathematics (such as order, perseverance, and logical reasoning) help us with the development of the natural virtues (such as self-discipline and fortitude)

K.9A	identify ways to earn income
K.9B	differentiate between money received as income and money received as gifts
K.9C	list simple skills required for jobs
K.9D	distinguish between wants and needs and identify income as a source to meet one's wants and needs