

Catholic Identity: Integration of Our Faith

- K.1A display a sense of wonder about mathematical relationships *
- K.1B respond to the beauty, harmony, proportion, radiance, and wholeness present in mathematics *
- K.1C show interest in how the mental processes evident within mathematics help us with the development of natural virtues *
- K.1D exhibit appreciation for the process of discovering meanings and truths and not just arriving at an answer *

Mathematical Learning Process Standards

K.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 | |
|---------------|---|--------------|---|
| K.2A | apply mathematics to problems arising in everyday life, society, and the workplace | K.2D | create and use representations to organize, record, and communicate mathematical ideas |
| K.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 | K.2E | analyze mathematical relationships to connect and communicate mathematical ideas |
| K.2C | exhibit joy at solving difficult mathematical problems and operations* | K.2F | develop lines of inquiry (as developmentally appropriate) to understand why things are true and why they are false* |

Representation and Comparison of Whole Numbers

K.3 Place Value. The student represents and compares whole numbers, the relative position and magnitude of whole numbers, and relationships within the numeration system related to place value.

| Applied Standards | Supporting Standards |
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| K.3A compose and decompose numbers up to 10 with objects and pictures | K.3A.1 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.3A.2 recite numbers up to at least 100 by ones and tens beginning with any given number K.3A.3 recognize instantly the quantity of a small group of objects in organized and random arrangements |
| K.3B read, write, and represent whole numbers from 0 to at least 20 with and without objects or pictures | |
| K.3C use comparative language to describe two numbers up to 20 presented as written numerals | K.3C.1 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.3C.2 generate a number that is one more than or one less than another number up to at least 20 |

Addition and Subtraction of Whole Numbers

K.4 Number and operations. The student develops an understanding of addition and subtraction situations in order to solve problems.

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| K.4A solve word problems using objects and drawings to find sums up to 10 | K.4A.1 model the action of joining to represent addition |
| K.4B solve word problems using objects and drawings to find differences within 10 | K.4B.1 model the action of separating to represent subtraction |

| Geometry | | |
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| K.6 Geometry and Measurement. The student analyzes attributes of two-dimensional shapes and three-dimensional solids to develop generalizations about their properties. | | |
| K.6A | classify and sort a variety of regular and irregular two-dimensional shapes regardless of orientation or size | K.6A.1 identify two-dimensional shapes, including circles, triangles, rectangles, and squares as special rectangles K.6A.2 identify attributes of two-dimensional shapes using informal and formal geometric language interchangeably K.6A.3 create two-dimensional shapes using a variety of materials and drawings |
| K.6B | classify and sort a variety of regular and irregular three-dimensional solids regardless of orientation or size | K.6B.1 identify three-dimensional solids, including cylinders, cones, spheres, and cubes, in the real world K.6B.2 identify two-dimensional components of three-dimensional objects |
| Measurement | | |
| K.6 Geometry and Measurement. The student selects and uses common measurable attributes to describe objects. | | |
| K.6C | compare two objects with a common measurable attribute to see which object has more or less of the attribute and describe the difference | K.6C.1 give an example of a measurable attribute of a given object, including length, capacity, and weight |
| K.6D | identify U.S. coins by name, including pennies, nickels, dimes, and quarters | |
| Data Analysis | | |
| K.7 Data analysis. The student organizes data to make it useful for interpreting information and solving problems. | | |
| K.7A | draw conclusions from real-object and picture graphs | K.7A.1 collect, sort, and organize data into two or three categories K.7A.2 use data to create real-object and picture graphs |