

## 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<br>K.3A.2 recite numbers up to at least 100 by ones and tens beginning with any given number<br>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<br>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**

**K.6 Geometry and Measurement.** The student analyzes attributes of two-dimensional shapes and three-dimensional solids to develop generalizations about their properties.

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| <p>K.6A classify and sort a variety of regular and irregular two-dimensional shapes regardless of orientation or size</p>   | <p>K.6A.1 identify two-dimensional shapes, including circles, triangles, rectangles, and squares as special rectangles<br/>K.6A.2 identify attributes of two-dimensional shapes using informal and formal geometric language interchangeably<br/>K.6A.3 create two-dimensional shapes using a variety of materials and drawings</p> |
| <p>K.6B classify and sort a variety of regular and irregular three-dimensional solids regardless of orientation or size</p> | <p>K.6B.1 identify three-dimensional solids, including cylinders, cones, spheres, and cubes, in the real world<br/>K.6B.2 identify two-dimensional components of three-dimensional objects</p>  |

**Measurement**

**K.6 Geometry and Measurement.** The student selects and uses common measurable attributes to describe objects.

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| <p>K.6C compare two objects with a common measurable attribute to see which object has more of/less of the attribute and describe the difference</p> | <p>K.6C.1 give an example of a measurable attribute of a given object, including length, capacity, and weight</p> |
| <p>K.6D identify U.S. coins by name, including pennies, nickels, dimes, and quarters</p>   |   |

**Data Analysis**

**K.7 Data analysis.** The student organizes data to make it useful for interpreting information and solving problems.

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| <p>K.7A draw conclusions from real-object and picture graphs</p> | <p>K.7A.1 collect, sort, and organize data into two or three categories<br/>K.7A.2 use data to create real-object and picture graphs</p> |
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