Catholic Schools
DIOCESE OF DALLAS

Catholic Identity: Integration of Our Faith

1.1A	display a sense of wonder about mathematical relationships *
1.1B	respond to the beauty, harmony, proportion, radiance, and wholeness present in mathematics *
1.1C	show interest in how the mental processes evident within mathematics help us with the development of natural virtues *
1.1D	exhibit appreciation for the process of discovering meanings and truths and not just arriving at an answer *

Mathematical Learning Process Standards

1.2 **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	
1.2A	apply mathematics to problems arising in everyday life, society, and the workplace	1.2D	create and use representations to organize, record, and communicate mathematical ideas
1.2B	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	1.2E	analyze mathematical relationships to connect and communicate mathematical ideas
		1.2F	develop lines of inquiry (as developmentally appropriate) to understand why things are true and why they are false*
1.2C	exhibit joy at solving difficult mathematical problems and operations*		

Numbers and Place Value

1.3 **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	
1.3A	use objects, pictures, expanded and standard forms to represent numbers up to 120	1.3A.1	recognize instantly the quantity of structured arrangements
1.3B	use place value to compare whole numbers up to 120 using comparative language	1.3B.1	use concrete and pictorial models to compose and decompose numbers up to 120 in more than one way as so many hundreds, so many tens, and so many ones
1.3C	represent the comparison of two numbers to 100 using the symbols >, <, or =	1.3C.1	generate a number that is greater than or less than a given whole number up to 120
		1.3C.2	order whole numbers up to 120 using place value and open number lines

Addition and Subtraction of Whole Numbers

1.4 **Number and operations.** The student develops and uses strategies for whole number addition and subtraction computations in order to solve problems.

1.4A	generate and solve problem situations when given a number sentence involving addition of numbers within 20	1.4A.1	apply properties of operations to add two or three numbers
		1.4A.2	use concrete and pictorial models to determine the sum of a multiple of ten and a one-digit number in problems up to 99
		1.4A.3	compose 10 with two or more addends with and without concrete objects
		1.4A.4	apply basic fact strategies to add within 20
		1.4A.5	skip count by twos, fives, and tens to determine the total number of objects up to 120 in a set
1.4B	generate and solve problem situations when given a number sentence involving subtraction of numbers within 20	1.4B.1	apply properties of operations to subtract two numbers
		1.4B.2	apply basic fact strategies to subtract within 20
1.4C	generate and solve problem situations when given a number sentence involving addition or subtraction of numbers within 20	1.4C.1	determine the unknown whole number in an addition or subtraction equation when the unknown may be any one of the three or four terms in the equation

Fractions

1.4	**Number and operations.** The student recognizes fractional units and communicates how they are used to name parts of a whole.
1.4D	partition two-dimensional figures into two and four fair shares or equal parts and describe the parts using words	1.4D.1 identify examples and non-examples of halves and fourths

Geometry

1.6	**Geometry and measurement.** The student analyzes attributes of two-dimensional shapes and three-dimensional solids to develop generalizations about their properties.
1.6A	classify and sort regular and irregular two-dimensional shapes based on attributes using informal geometric language	1.6A.1 identify two-dimensional shapes, including circles, triangles, rectangles, and squares, as special rectangles, rhombuses, and hexagons, and describe their attributes using formal geometric language 1.6A.2 distinguish between attributes that define a two-dimensional shape and attributes that do not 1.6A.3 create two-dimensional figures, including circles, triangles, rectangles, and squares as special rectangles, rhombuses, and hexagons 1.6A.4 compose two-dimensional shapes by joining two, three, or four figures to produce a target shape in more than one way if possible
1.6B	identify three-dimensional solids, including spheres, cones, cylinders, rectangular prisms (including cubes), and triangular prisms, and describe their attributes using formal geometric language	1.6B.1 distinguish between attributes that define a three-dimensional solid and attributes that do not

Measurement

1.6	**Geometry and measurement.** The student selects and use units to describe length and time.
1.6C	describe a length to the nearest whole unit using a number and a unit	1.6C.1 illustrate that the length of an object is the number of same-size units of length that, when laid end-to-end with no gaps or overlaps, reach from one end of the object to the other 1.6C.2 measure the same object/distance with units of two different lengths and describe how and why the measurements differ 1.6C.3 use non-standard measuring tools to measure the length of objects
1.6D	tell time to the hour and half hour using analog and digital clocks	
1.6E	use relationships to count by twos, fives, and tens to determine the value of a collection of pennies, nickels, and/or dimes	1.6E.1 identify U.S. coins including pennies, nickels, dimes, and quarters by value and describe the relationships between them 1.6E.2 write a number with the cent symbol to describe the value of a coin

Data Analysis

1.7	**Data analysis.** The student organizes data to make it useful for interpreting information and solving problems.
1.7A	draw conclusions and generate and answer questions using information from picture and bar-type graphs	1.7A.1 use data to create picture and bar-type graphs 1.7A.2 collect, sort, and organize data in up to three categories using models/representations such as tally marks or T-charts