

Unit Maps: Grade 5 Math

Whole Number Operations	Unit	CHECKPOINT		
		1	2	3
5.4 Number and operations. The student develops and uses strategies and methods for positive rational number computations in order to solve problems with efficiency and accuracy.				

Catholic Identity: Integration of Our Faith				
5.1A	display a sense of wonder about mathematical relationships *			
5.1B	respond to the beauty, harmony, proportion, radiance, and wholeness present in mathematics *			
5.1C	show interest in how the mental processes evident within mathematics help us with the development of natural virtues *			
5.1D	exhibit appreciation for the process of discovering meanings and truths and not just arriving at an answer *			

Learning Process Standards (Tools to Know)	Unit	CHECKPOINT		
		1	2	3
5.2A	determine math needed to solve problems			
5.2B	use problem-solving models			
5.2C	exhibit joy at solving difficult mathematical problems *			

Content	Unit	CHECKPOINT		
		1	2	3

All Operations of Whole Numbers				
5.4A	represent and solve multi-step problems involving the four operations with whole numbers using equations with a letter standing for the unknown quantity			
5.4A.1	estimate to determine solutions to mathematical and real-world problems involving addition and subtraction, multiplication, or division			
5.4A.2	multiply with fluency a three-digit number by a two-digit number using the standard algorithm			
5.4A.3	solve with proficiency for quotients of up to a four-digit dividend by a two-digit divisor using strategies and the standard algorithm			

Algebraic Representations				
5.4B	simplify numerical expressions that do not involve exponents, including up to two levels of grouping			
5.4B.1	describe the meaning of parentheses and brackets in a numeric expression			

Learning Process Standards (Ways to Show)	Unit	CHECKPOINT		
		1	2	3
5.2D	create representations			
5.2E	analyze information			
5.2F	develop lines of inquiry to determine truth or falsehood *			

Unit Maps: Grade 5 Math

Decimals	Unit	CHECKPOINT		
		1	2	3
5.3 Place value. The student represents, compares, and orders positive rational numbers and understand relationships as related to place value.				
5.4 Number and operations. The student develops and uses strategies and methods for positive rational number computations in order to solve problems with efficiency and accuracy.				

Catholic Identity: Integration of Our Faith				
5.1A	display a sense of wonder about mathematical relationships *			
5.1B	respond to the beauty, harmony, proportion, radiance, and wholeness present in mathematics *			
5.1C	show interest in how the mental processes evident within mathematics help us with the development of natural virtues *			
5.1D	exhibit appreciation for the process of discovering meanings and truths and not just arriving at an answer *			

Learning Process Standards (Tools to Know)		Unit	CHECKPOINT		
			1	2	3
5.2A	determine math needed to solve problems				
5.2B	use problem-solving models				
5.2C	exhibit joy at solving difficult mathematical problems *				

Content		Unit	CHECKPOINT		
			1	2	3
Comparing Decimals					
5.3A	compare and order two decimals to thousandths and represent comparisons using the symbols $>$, $<$, or $=$				
5.3A.1	represent the value of the digit in decimals through the thousandths using expanded notation and numerals				

Addition/Subtraction of Decimals					
5.4C	add and subtract positive decimals fluently				
5.4C.1	round decimals to tenths or hundredths				

Multiplication of Decimals					
5.4D	solve for products of decimals to the hundredths, including situations involving money, using strategies based on place-value understandings, properties of operations, and the relationship to the multiplication of whole numbers				
5.4D.1	represent multiplication of decimals with products to the hundredths using objects and pictorial models, including area models				

Division of Decimals					
5.4E	solve for quotients of decimals to the hundredths, up to four-digit dividends and two-digit whole number divisors, using strategies and algorithms, including the standard algorithm				
5.4E.1	represent quotients of decimals to the hundredths, up to four-digit dividends and two-digit whole number divisors, using objects and pictorial models, including area models				

Learning Process Standards (Ways to Show)		Unit	CHECKPOINT		
			1	2	3
5.2D	create representations				
5.2E	analyze information				
5.2F	develop lines of inquiry to determine truth or falsehood *				

Unit Maps: Grade 5 Math

Fractions	Unit	CHECKPOINT		
		1	2	3
5.4 Number and operations. The student develops and use strategies and methods for positive rational number computations in order to solve problems with efficiency and accuracy.				

Catholic Identity: Integration of Our Faith				
5.1A	display a sense of wonder about mathematical relationships *			
5.1B	respond to the beauty, harmony, proportion, radiance, and wholeness present in mathematics *			
5.1C	show interest in how the mental processes evident within mathematics help us with the development of natural virtues *			
5.1D	exhibit appreciation for the process of discovering meanings and truths and not just arriving at an answer *			

Learning Process Standards (Tools to Know)	Unit	CHECKPOINT		
		1	2	3
5.2A determine math needed to solve problems				
5.2B use problem-solving models				
5.2C exhibit joy at solving difficult mathematical problems *				

Content	Unit	CHECKPOINT		
		1	2	3
Addition/Subtraction of Fractions				
5.5F add and subtract fractions fluently				
5.4F.1 represent and solve addition and subtraction of fractions with unequal denominators				

Multiplication of Fractions				
5.4G represent and solve multiplication of a whole number and a fraction				
5.4G.1 identify prime and composite numbers				

Division of Fractions				
5.4H divide whole numbers by unit fractions and unit fractions by whole numbers				
5.4H.1 represent division of a unit fraction by a whole number and the division of a whole number by a unit fraction such as $1/3 \div 7$ and $7 \div 1/3$ using objects and pictorial models, including area models				

Learning Process Standards (Ways to Show)	Unit	CHECKPOINT		
		1	2	3
5.2D create representations				
5.2E analyze information				
5.2F develop lines of inquiry to determine truth or falsehood *				

Unit Maps: Grade 5 Math

Graphing on Coordinate Plane	Unit	CHECKPOINT		
		1	2	3
5.6 Geometry and measurement. The student graphs and interprets points, expressions, and equations on a coordinate plane.				

Catholic Identity: Integration of Our Faith				
5.1A	display a sense of wonder about mathematical relationships *			
5.1B	respond to the beauty, harmony, proportion, radiance, and wholeness present in mathematics *			
5.1C	show interest in how the mental processes evident within mathematics help us with the development of natural virtues *			
5.1D	exhibit appreciation for the process of discovering meanings and truths and not just arriving at an answer *			

Learning Process Standards (Tools to Know)	Unit	CHECKPOINT		
		1	2	3
5.2A determine math needed to solve problems				
5.2B use problem-solving models				
5.2C exhibit joy at solving difficult mathematical problems *				

Content	Unit	CHECKPOINT		
		1	2	3
Coordinate Plane				
5.6A graph in the first quadrant of the coordinate plane ordered pairs of numbers arising from mathematical and real-world problems, including those generated by number patterns or found in an input-output table				
5.6A.1 describe the process for graphing ordered pairs of numbers in the first quadrant of the coordinate plane				
Linear Representations				
5.6B generate a numerical pattern when given a rule in the form $y = ax$ or $y = x + a$ and graph				
5.6B.1 recognize the difference between additive and multiplicative numerical patterns given in a table or graph				

Learning Process Standards (Ways to Show)	Unit	CHECKPOINT		
		1	2	3
5.2D create representations				
5.2E analyze information				
5.2F develop lines of inquiry to determine truth or falsehood *				

Unit Maps: Grade 5 Math

Measurement	Unit	CHECKPOINT		
		1	2	3
5.6 Geometry and measurement. The student solves problems involving perimeter, area and volume and converts within a unit of measurement.				

Catholic Identity: Integration of Our Faith				
5.1A	display a sense of wonder about mathematical relationships *			
5.1B	respond to the beauty, harmony, proportion, radiance, and wholeness present in mathematics *			
5.1C	show interest in how the mental processes evident within mathematics help us with the development of natural virtues *			
5.1D	exhibit appreciation for the process of discovering meanings and truths and not just arriving at an answer *			

Learning Process Standards (Tools to Know)	Unit	CHECKPOINT		
		1	2	3
5.2A	determine math needed to solve problems			
5.2B	use problem-solving models			
5.2C	exhibit joy at solving difficult mathematical problems *			

Content	Unit	CHECKPOINT		
		1	2	3
Perimeter and Area				
5.6C	represent and solve problems related to perimeter and area			

Volume	Unit	CHECKPOINT		
		1	2	3
5.6D	represent and solve problems related to volume including the relationship to perimeter and area			
5.6D.1	recognize a cube with side length of one unit as a unit cube having one cubic unit of volume and the volume of a three-dimensional figure as the number of unit cubes (n cubic units) needed to fill it with no gaps or overlaps if possible			
5.6D.2	determine the volume of a rectangular prism with whole number side lengths in problems related to the number of layers times the number of unit cubes in the area of the base			
5.6D.3	use concrete objects and pictorial models to develop the formulas for the volume of a rectangular prism, including the special form for a cube ($V = l \times w \times h$, $V = s \times s \times s$, and $V = Bh$)			

Conversions	Unit	CHECKPOINT		
		1	2	3
5.6E	solve problems by calculating conversions within a measurement system, customary or metric			

Learning Process Standards (Ways to Show)	Unit	CHECKPOINT		
		1	2	3
5.2D	create representations			
5.2E	analyze information			
5.2F	develop lines of inquiry to determine truth or falsehood *			

Unit Maps: Grade 5 Math

Data Analysis	Unit	CHECKPOINT		
		1	2	3
5.7 Data analysis. The student solves problems by collecting, organizing, displaying, and interpreting data.				

Catholic Identity: Integration of Our Faith				
5.1A	display a sense of wonder about mathematical relationships *			
5.1B	respond to the beauty, harmony, proportion, radiance, and wholeness present in mathematics *			
5.1C	show interest in how the mental processes evident within mathematics help us with the development of natural virtues *			
5.1D	exhibit appreciation for the process of discovering meanings and truths and not just arriving at an answer *			

Learning Process Standards (Tools to Know)	Unit	CHECKPOINT		
		1	2	3
5.2A determine math needed to solve problems				
5.2B use problem-solving models				
5.2C exhibit joy at solving difficult mathematical problems *				

Content	Unit	CHECKPOINT		
		1	2	3
Using Data to Solve Problems				
5.7A solve one- and two-step problems using data from a frequency table, dot plot, bar graph, stem-and-leaf plot, or scatterplot				
5.7A.1 represent categorical data with bar graphs or frequency tables and numerical data, including data sets of measurements in fractions or decimals, with dot plots or stem-and-leaf plots				
5.7A.2 represent discrete paired data on a scatterplot				

Learning Process Standards (Ways to Show)	Unit	CHECKPOINT		
		1	2	3
5.2D create representations				
5.2E analyze information				
5.2F develop lines of inquiry to determine truth or falsehood *				