

Diocese of Jefferson City Curriculum Guide

Content Area: Math
 Grade Range: Third
 Section/Heading: 3.A.1

Strand: Problem Solving

Diocesan Standard Terra Nova Objective	Benchmark Statement
Use a variety of strategies in the problem-solving process	Use reasoning abilities to perceive patterns, identify relationships between addition and multiplication, formulate questions for further exploration, justify strategies, check if results are reasonable.

Performance Indicators		
<ol style="list-style-type: none"> 1. Identify the properties or characteristics of patterns. 2. Extend geometric and numerical patterns. 3. Use a variety of strategies. 4. Create a physical example. 5. Use the four-step problem-solving method. 		
Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

Content Area: Math
 Grade Range: Third
 Section/Heading: 3.A.2

Strand: Problem Solving

Diocesan Standard Terra Nova Objective	Benchmark Statement
Use a variety of strategies in the problem-solving process	Communicate mathematical ideas in a variety of ways.

Performance Indicators		
Use: <ol style="list-style-type: none"> 1. Words. 2. Numbers/Symbols. 3. Pictures. 4. Charts/graphs/tables. 5. Diagrams/models. 		
Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

Content Area: Math
 Grade Range: Third
 Section/Heading: 3.A.3

Strand: Problem Solving

Diocesan Standard Terra Nova Objective	Benchmark Statement
Use a variety of strategies in the problem-solving process	Connect mathematical learning with other subjects, personal experiences, current events and personal interest.

Performance Indicators		
<ol style="list-style-type: none"> 1. See relationship between various kinds of problems and actual events. 2. Relate actual time to daily activities. 3. Use mathematics as a way to understand other curriculum areas. 		
Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

Content Area: Math
 Grade Range: Third
 Section/Heading: 3.A.4

Strand: Problem Solving

Diocesan Standard Terra Nova Objective	Benchmark Statement
Use a variety of strategies in the problem-solving process	Use appropriate mathematical vocabulary, symbols, and notation with understanding based on prior conceptual work.

Performance Indicators		
1. Use vocabulary, symbols and notations appropriately.		
Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

Content Area: Math
 Grade Range: Third
 Section/Heading: 3.A.5

Strand: Problem Solving

Diocesan Standard Terra Nova Objective	Benchmark Statement
Use a variety of strategies in the problem-solving process	Explain solutions to problems clearly and logically in oral and written work and support solutions with evidence.

Performance Indicators		
1. Explain and support solutions.		
Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

Content Area: Math
 Grade Range: Third
 Section/Heading: 3B.1

Strand: Properties and Concepts of Numbers

Diocesan Standard Terra Nova Objective	Benchmark Statement
Understand and apply basic and advanced properties of the concepts of numbers.	Represent and explain whole numbers and fractions with various forms.

Performance Indicators		
Uses: <ol style="list-style-type: none"> 1. Physical materials. 2. Number lines and other pictorial models. 3. Verbal descriptions. 4. Place-value concepts to notation to 100,000. 5. Symbolic renaming ($43=40+3=30+13$). 		
Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

Content Area: Math
 Grade Range: Third
 Section/Heading: 3.B.2

Strand: Properties and Concepts of Numbers

Diocesan Standard Terra Nova Objective	Benchmark Statement
Understand and apply basic and advanced properties of the concepts of numbers.	Determine number of things in a set.

Performance Indicators		
<ol style="list-style-type: none"> 1. Group and count sets. 2. Use number theory principles; identify and continue numerical patterns, skip count odd and even numbers. 3. Combine and arrange. 4. Compare equivalent and non-equivalent money amounts. 5. Estimate, including rounding. 6. Round whole numbers to the nearest tens and hundreds place. 		
Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

Content Area: Math
 Grade Range: Third
 Section/Heading: 3.B.3

Strand: Properties and Concepts of Numbers

Diocesan Standard Terra Nova Objective	Benchmark Statement
Understand and apply basic and advanced properties of the concepts of numbers.	Read, write and order up to 4-digit whole numbers and simple fractions.

Performance Indicators
1. Work with halves, fourths, tenths and unit fractions which have one as the numerator.

Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

Content Area: Math
 Grade Range: Third
 Section/Heading: 3.B.4

Strand: Properties and Concepts of Numbers

Diocesan Standard Terra Nova Objective	Benchmark Statement
Understand and apply basic and advanced properties of the concepts of numbers.	Identify and represent equivalent fractions.

Performance Indicators		
1. Draw and build sets to demonstrate halves, quarters and eighths.		
Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

Content Area: Math
 Grade Range: Third
 Section/Heading: 3.C.1

Strand: Computation

Diocesan Standard Terra Nova Objective	Benchmark Statement
Uses basic and advanced procedures while performing the process of computation	Select and efficiently use appropriate computational procedures involving whole numbers in problem solving situations.

Performance Indicators		
<ol style="list-style-type: none"> 1. Recall basic facts of addition, subtraction, multiplication and division. 2. Memorize multiplication and division facts 0-9 3. Use mental math. 4. Estimate. 5. Select and apply algorithms for addition, subtraction, multiplication and division. 6. Add and subtract 3 and 4 digit numbers with regrouping. 7. Use a calculator to assist and check solutions to problems. 		
Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

Content Area: Math
 Grade Range: Third
 Section/Heading: 3.E.1

Strand: Geometry

Diocesan Standard Terra Nova Objective	Benchmark Statement
Understand and apply basic and advanced properties of the concepts of geometry	Describe two and three dimensional figures.

Performance Indicators		
<ol style="list-style-type: none"> 1. Identify and name proprieties of two and three dimensional figures. 2. Compare, sort and classify. 3. Draw and construct physical models for two dimensional figures. 4. Explains how figures relate to objects in environment (circles, polygons, trapezoids, prisms, spheres, etc.). 		
Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

Content Area: Math
 Grade Range: Third
 Section/Heading: 3.E.2

Strand: Geometry

Diocesan Standard Terra Nova Objective	Benchmark Statement
Understand and apply basic and advanced properties of the concepts of geometry	Use physical materials and motion geometry (slides, flips and turns) to identify properties and relationships.

Performance Indicators		
1. Identify symmetry, congruence and similarity of figures.		
Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

Content Area: Math
 Grade Range: Third
 Section/Heading: 3.D.1

Strand: Measurement

Diocesan Standard Terra Nova Objective	Benchmark Statement
Understand and apply basic and advanced properties of the concepts of measurement.	Recognize and describe measurable attributes and identifies the appropriate units to measure them.

Performance Indicators		
1. Measure length, liquid capacity, time, weight (mass), temperature, volume, monetary value, and angle size.		
Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

Content Area: Math
 Grade Range: Third
 Section/Heading: 3.D.2

Strand: Measurement

Diocesan Standard Terra Nova Objective	Benchmark Statement
Understand and apply basic and advanced properties of the concepts of measurement.	Demonstrate understanding of basic facts, principles and techniques of measuring.

Performance Indicators		
<ol style="list-style-type: none"> 1. Use appropriate non-standard and standard units (metric and US). 2. Select appropriate unit of measure (mile/foot/inch). 3. Use appropriate conversion of units within a system (yards, feet, inches; kilograms and grams; gallons, quarts, pints and cups). 4. Judge the reasonableness of an obtained measurement as it relates to prior experience and familiar benchmarks. 		
Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

Content Area: Math
 Grade Range: Third
 Section/Heading: 3.D.3

Strand: Measurement

Diocesan Standard Terra Nova Objective	Benchmark Statement
Understand and apply basic and advanced properties of the concepts of measurement.	Determine measurements directly by using standard tools to the suggested degree of accuracy.

Performance Indicators		
<ol style="list-style-type: none"> 1. Measure length to the nearest half-inch or cm. 2. Read temperature to the nearest 5 degrees. 3. Tell time to the nearest one-minute interval. 4. Count monetary value of dollars and cents to total of \$10.00. 5. Measure liquid capacity to the nearest fluid ounce. 		
Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

Content Area: Math
 Grade Range: Third
 Section/Heading: 3.D.4

Strand: Measurement

Diocesan Standard Terra Nova Objective	Benchmark Statement
Understand and apply basic and advanced properties of the concepts of measurement.	Determine measurements by using basic relationships and approximate by using estimation techniques.

Performance Indicators		
1. Estimate lengths to the nearest inch, foot, centimeter and meter.		
Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

Content Area: Math
 Grade Range: Third
 Section/Heading: 3.F.1

Strand: Probability and Data Analysis

Diocesan Standard Terra Nova Objective	Benchmark Statement
Understand and apply basic and advanced properties of probability and data analysis.	Work with data in the context of real-word situations.

Performance Indicators		
<ol style="list-style-type: none"> 1. Formulate questions that lead to data collection and analysis. 2. Determine what data to collect and how to collect it. 3. Collect, organize and display data. 4. Draw reasonable conclusions based on data. 		
Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

Content Area: Math
 Grade Range: Third
 Section/Heading: 3.F.2

Strand: Probability and Data Analysis

Diocesan Standard Terra Nova Objective	Benchmark Statement
Understand and apply basic and advanced properties of probability and data analysis.	Use charts, graphs and tables to solve problems.

Performance Indicators		
1. Read, extract, interpret and use information presented in graphs, tables or charts in problem-solving situations.		
Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

Content Area: Math
 Grade Range: Third
 Section/Heading: 3.F.3

Strand: Probability and Data Analysis

Diocesan Standard Terra Nova Objective	Benchmark Statement
Understand and apply basic and advanced properties of probability and data analysis.	Predict outcomes of future events and test predictions using data from a variety of sources.

Performance Indicators		
1. Work with future events and test predictions appropriately.		
Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

Content Area: Math
 Grade Range: Third
 Section/Heading: 3.G.1

Strand: Functions and Algebra

Diocesan Standard Terra Nova Objective	Benchmark Statement
Understand and apply basic and advanced properties of functions and algebra	Use letters, boxes or other symbols to stand for any number, measured quantity, or object in simple situations.

Performance Indicators		
1. Use letters, boxes or other symbols as variables.		
Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

Content Area: Math
 Grade Range: Third
 Section/Heading: 3.G.2

Strand: Functions and Algebra

Diocesan Standard Terra Nova Objective	Benchmark Statement
Understand and apply basic and advanced properties of functions and algebra	Use the vocabulary, symbols, and notation of algebra accurately.

Performance Indicators		
<ol style="list-style-type: none"> 1. Use the “=” symbol correctly. 2. Use effectively the Associative Property of Multiplication. 		
Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

Content Area: Math
 Grade Range: Third
 Section/Heading: 3.G.3

Strand: Functions and Algebra

Diocesan Standard Terra Nova Objective	Benchmark Statement
Understand and apply basic and advanced properties of functions and algebra	Work with simple linear patterns and relationships in a variety of ways.

Performance Indicators		
<ol style="list-style-type: none"> 1. Recognize and extend number patterns. 2. Describe verbally. 3. Represent patterns with pictures, tables, charts, and graphs. 4. Recognize that different models can represent same pattern or relationship. 5. Use patterns to describe real-world phenomena. 		
Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

Content Area: Math
 Grade Range: Third
 Section/Heading: 3.G.4

Strand: Functions and Algebra

Diocesan Standard Terra Nova Objective	Benchmark Statement
Understand and apply basic and advanced properties of functions and algebra	Recognize variability in simple functional relationships by describing how a change in one quantity can produce a change in another.

Performance Indicators		
1. Describe how change can produce change.		
Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

Content Area: Math
 Grade Range: Third
 Section/Heading: 3.G.5

Strand: Functions and Algebra

Diocesan Standard Terra Nova Objective	Benchmark Statement
Understand and apply basic and advanced properties of functions and algebra	Use simple equations and inequalities in a variety of ways.

Performance Indicators		
<ol style="list-style-type: none"> 1. Write number sentences that model real-life situations. 2. Solve using different methods. 3. Record and describe solution strategies. 		
Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

Content Area: Math
 Grade Range: Third
 Section/Heading: 3.G.6

Strand: Functions and Algebra

Diocesan Standard Terra Nova Objective	Benchmark Statement
Understand and apply basic and advanced properties of functions and algebra	Recognize and use generalized properties and relationships of arithmetic.

Performance Indicators		
1. Demonstrate the commutative property of multiplication and whole numbers.		
Suggested Activities	Assessment	Resources