

Diocese of Jefferson City Curriculum Guide

Content Area: Math
 Grade Range: Seventh
 Section/Heading: 7.A.1

Strand: Problem Solving

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

Performance Indicators		
1. Use tables to solve word problems.		
Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

Content Area: Math
 Grade Range: Seventh
 Section/Heading: 7.A.2

Strand: Problem Solving

Diocesan Standard Terra Nova Objective	Benchmark Statement
Use a variety of strategies in the problem-solving process.	Use a variety of strategies to understand problem-solving situations and processes.

Performance Indicators		
<ol style="list-style-type: none"> 1. Generalize from a pattern of observations. 2. Make conjectures. 3. Provide supporting arguments for conjectures. 		
Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

Content Area: Math
 Grade Range: Seventh
 Section/Heading: 7.B.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.	Understand the relationship among equivalent number representations.

Performance Indicators		
1. Convert integers, ratios and exponents.		
Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

Content Area: Math
 Grade Range: Seventh
 Section/Heading: 7.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.	Understand the characteristics and properties of the set of real numbers and its subsets.

Performance Indicators		
1. Distinguish and order integers and rationals.		
Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

Content Area: Math
 Grade Range: Seventh
 Section/Heading: 7.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.	Understand the uses of exponents.

Performance Indicators		
1. Convert between mathematical expressions and exponents.		
Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

Content Area: Math
 Grade Range: Seventh
 Section/Heading: 7.C.1

Strand: Computation

Diocesan Standard Terra Nova Objective	Benchmark Statement
Use basic and advanced procedures while performing the process of computation.	Understand the properties of operations with rational numbers.

Performance Indicators		
1. Apply the inverse property to solve equations.		
Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

Content Area: Math
 Grade Range: Seventh
 Section/Heading: 7.C.2

Strand: Computation

Diocesan Standard Terra Nova Objective	Benchmark Statement
Use basic and advanced procedures while performing the process of computation.	Use proportional reasoning to solve mathematical and real-world problems.

Performance Indicators		
1. Use percent, proportions and ratios to solve mathematical and real-world problems.		
Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

Content Area: Math
 Grade Range: Seventh
 Section/Heading: 7.C.3

Strand: Computation

Diocesan Standard Terra Nova Objective	Benchmark Statement
Use basic and advanced procedures while performing the process of computation.	Add, subtract, multiply and divide whole numbers, fractions and decimals.

Performance Indicators		
1. Add, subtract, multiply and divide integers.		
Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

Content Area: Math
 Grade Range: Seventh
 Section/Heading: 7.C.4

Strand: Computation

Diocesan Standard Terra Nova Objective	Benchmark Statement
Use basic and advanced procedures while performing the process of computation.	Understand when an estimate is more appropriate than an exact answer for a variety of problem situations.

Performance Indicators		
1. Use estimation skills when appropriate in problem-solving.		
Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

Content Area: Math
 Grade Range: Seventh
 Section/Heading: 7.D.1

Strand: Measurement

Diocesan Standard Terra Nova Objective	Benchmark Statement
Understand and apply basic and advanced properties of the concepts of measurement	Solve problems involving units of measurement and convert answers to a larger or smaller unit within the same system.

Performance Indicators		
1. Solve problems involving units of measurement and convert answers to a larger or smaller unit within the same system.		
Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

Content Area: Math
 Grade Range: Seventh
 Section/Heading: 7.D.2

Strand: Measurement

Diocesan Standard Terra Nova Objective	Benchmark Statement
Understand and apply basic and advanced properties of the concepts of measurement	Solve problems involving perimeter, circumference and area of various shapes.

Performance Indicators
<ol style="list-style-type: none"> 1. Find circumference of a circle using formula. 2. Find area of trapezoids and circles using formulas.

Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

Content Area: Math
 Grade Range: Seventh
 Section/Heading: 7E.1

Strand: Geometry

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

Performance Indicators		
1. Define properties of cylinders, pyramids, cones, spheres and all other three dimensional figures.		
Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

Content Area: Math
 Grade Range: Seventh
 Section/Heading: 7E.2

Strand: Geometry

Diocesan Standard Terra Nova Objective	Benchmark Statement
Understand and apply basic and advanced properties of the concepts of geometry	Understand geometric transformation of figures.

Performance Indicators
<ol style="list-style-type: none"> 1. Form combined rotations, translations, reflections (diagonal, vertical, horizontal). 2. Understand correlation of slides, flips and turns.

Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

Content Area: Math
 Grade Range: Seventh
 Section/Heading: 7.E.3

Strand: Geometry

Diocesan Standard Terra Nova Objective	Benchmark Statement
Understand and apply basic and advanced properties of the concepts of geometry	Understand the mathematical concepts of similarity and congruency.

Performance Indicators		
1. Identify congruency and similarities of two-dimensional figures.		
Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

Content Area: Math
 Grade Range: Seventh
 Section/Heading: 7.E.4

Strand: Geometry

Diocesan Standard Terra Nova Objective	Benchmark Statement
Understand and apply basic and advanced properties of the concepts of Geometry.	Understand geometric constructions.

Performance Indicators		
1. Use compass and straightedge to construct parallel lines, perpendicular lines and congruent triangles.		
Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

Content Area: Math
 Grade Range: Seventh
 Section/Heading: 7.F.1

Strand: Probability and Data Analysis

Diocesan Standard Terra Nova Objective	Benchmark Statement
Understand and apply basic and advanced concepts of probability and data analysis	Understand measures of central tendency, frequency distribution, and variability and their applications to specific situations.

Performance Indicators		
1. Understand and compute central tendency, frequency and distribution.		
Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

Content Area: Math
 Grade Range: Seventh
 Section/Heading: 7.F.2

Strand: Probability and Data Analysis.

Diocesan Standard Terra Nova Objective	Benchmark Statement
Understand and apply basic and advanced concepts of probability and data analysis	Select and use the best method of representing and describing a set of data.

Performance Indicators		
1. Select and use the best method of representing and describing a set of data.		
Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

Content Area: Math
 Grade Range: Seventh
 Section/Heading: 7.F.3

Strand: Probability and Data Analysis.

Diocesan Standard Terra Nova Objective	Benchmark Statement
Understand and apply basic and advanced concepts of probability and data analysis	Determine probability using mathematical/theoretical models and simulations or experiments.

Performance Indicators		
1. Determine probability using mathematical/theoretical models and simulations or experiments.		
Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

Content Area: Math
 Grade Range: Seventh
 Section/Heading: 7G.1

Strand: Functions and Algebra

Diocesan Standard Terra Nova Objective	Benchmark Statement
Understand and apply basic and advanced properties of functions and algebra	Know that an expression is a mathematical statement using numbers and symbols to represent relationships and real-world situations.

Performance Indicators		
1. Express written sentences as mathematical expressions using pi, brackets and square roots.		
Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

Content Area: Math
 Grade Range: Seventh
 Section/Heading: 7.G.2

Strand: Function and Algebra

Diocesan Standard Terra Nova Objective	Benchmark Statement
Understand and apply basic and advanced properties of functions and algebra	Understand various representations of patterns and functions and the relationships among them.

Performance Indicators		
1. Use various representations of the functions.		
Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

Content Area: Math
 Grade Range: Seventh
 Section/Heading: 7.G.3

Strand: Functions and Algebra

Diocesan Standard Terra Nova Objective	Benchmark Statement
Understand and apply basic and advanced properties of functions and algebra	Solve linear equations using concrete, formal and informal methods.

Performance Indicators		
1. Solve linear equations using concrete, formal and informal methods.		
Suggested Activities	Assessment	Resources