

Diocese of Jefferson City Curriculum Guide

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

Strand: Science Connections

Diocesan Standard Terra Nova Objective	Benchmark Statement
Science Connections	Ask and answer questions that will help decide the general area being addressed.

Performance Indicators		
Using topics such as water surface, minerals, nutrients, simple machines, and solar systems students will: <ol style="list-style-type: none"> 1. Pose and solve problems. 2. Collect, organize and interpret data. 		
Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

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

Strand: Science Connections

Diocesan Standard Terra Nova Objective	Benchmark Statement
Science Connections	Decide what evidence, models, or explanations previously studied can be used to better understand what is happening when investigating science-related problems.

Performance Indicator		
Using topics such as water surface, minerals, nutrients, simple machines and solar systems, students will: <ol style="list-style-type: none"> 1. Draw on prior knowledge in constructing a food pyramid and a model of a habitat. 2. Through exploring the meaning of the 10 commandments understand how to live in good relationship with God and each other. 		
Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

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

Strand: Nature of Science

Diocesan Standard Terra Nova Objective	Benchmark Statement
Nature of Science	Use encyclopedias, source books, texts, computers, teachers, parents, other adults and various other sources to help answer science related questions and plan investigations.

Performance Indicator
1. Understand and demonstrate that scientific understanding is always changing. 2. Understand and demonstrate that students can be scientists.

Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

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

Strand: Nature of Science

Diocesan Standard Terra Nova Objective	Benchmark Statement	
Nature of Science	Acquire information about people who have contributed to the development of major ideas in the sciences and learn about the cultures, in which these people lived and worked.	
Performance Indicator		
1. Define and use scientific vocabulary.		
Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

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

Strand: Nature of Science

Diocesan Standard Terra Nova Objective	Benchmark Statement
Nature of Science	Show how the major developments of scientific knowledge in the earth and space, life and environmental and physical sciences have changed over time.

Performance Indicator		
1. Compare and contrast scientific beliefs about the solar system of the past and in the present.		
Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

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

Strand: Science Inquiry

Diocesan Standard Terra Nova Objective	Benchmark Statement
Science Inquiry	Select multiple sources of information to help answer questions selected for classroom investigations.

Performance Indicator		
1. Consult reliable resources for scientific information.		
Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

Content Area: Science
 Grade Range: Third Grade
 Section/Heading: 3.C.4

Strand: Science Inquiry

Diocesan Standard Terra Nova Objective	Benchmark Statement	
Science Inquiry	Use simple science equipment safely and effectively, including rulers, balances, graduated cylinders, hand lenses, thermometers, and computers, to collect data relevant to questions and investigations.	
Performance Indicator		
<ol style="list-style-type: none"> 1. Choose and operate appropriate measuring tools. 2. Construct and conduct an experiment to answer scientific questions. 		
Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

Content Area: Science
 Grade Range: Third Grade
 Section/Heading: 3.C.5

Strand: Science Inquiry

Diocesan Standard Terra Nova Objective	Benchmark Statement
Science Inquiry	Use data collected to develop explanations and answer questions generated by investigations.

Performance Indicator		
1. Use data to construct explanations.		
Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

Content Area: Science
 Grade Range: Third Grade
 Section/Heading: 3.C.6

Strand: Science Inquiry

Diocesan Standard Terra Nova Objective	Benchmark Statement
Science Inquiry	Communicate the results of investigations to audiences by using charts, graphs, drawings, written descriptions, and various other menus to display answers.

Performance Indicator		
<ol style="list-style-type: none"> 1. Demonstrate alternative ways to display data. 2. Demonstrate that explanations are developed from observation and are based on what is already known about the world. 		
Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

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

Strand: Physical Science

Diocesan Standard Terra Nova Objective	Benchmark Statement
Physical Science	Understand that substances can exist in different states: solid, liquid, gas.

Performance Indicator		
1. Observe the various states of water.		
Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

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

Strand: Physical Science

Diocesan Standard Terra Nova Objective	Benchmark Statement
Physical Science	Observe and describe changes in form, temperature, color, speed and direction of objects and construct explanations for the changes.

Performance Indicator		
1. Construct models of a simple machine.		
Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

Content Area: Science
 Grade Range: Third Grade
 Section/Heading: 3.D.6

Strand: Physical Science

Diocesan Standard Terra Nova Objective	Benchmark Statement
Physical Science	Observe and describe physical events in objects at rest or in motion.

Performance Indicator
1. Observe and communicate reasons for objects at rest or in motion.

Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

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

Strand: Earth and Space Science

Diocesan Standard Terra Nova Objective	Benchmark Statement
Earth and Space Science	Investigate that earth materials are composed of rocks and soils and correctly use the vocabulary for rocks, minerals, and soils during investigations.

Performance Indicator		
1. Observe that the natural environment is in a constant state of change.		
Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

Content Area: Science
 Grade Range: Third Grade
 Section/Heading: 3.E.4

Strand: Earth and Space Science

Diocesan Standard Terra Nova Objective	Benchmark Statement
Earth and Space Science	Identify celestial objects noting changes in patterns of those objects over time.

Performance Indicator
<ol style="list-style-type: none"> 1. Identify sun and moon and explain changes in patterns. 2. Construct model of solar system. 3. Describe similarities and differences of the earth and moon. 4. Observe and identify diversity and changes in the solar system.

Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

Content Area: Science
 Grade Range: Third Grade
 Section/Heading: 3.E.6

Strand: Earth and Space Science

Diocesan Standard Terra Nova Objective	Benchmark Statement	
Earth and Space Science	Find patterns and cycles in the earth's daily, yearly and long term changes.	
Performance Indicator		
1. Observe shadows and the nature of eclipse.		
Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

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

Strand: Life and Environmental Science

Diocesan Standard Terra Nova Objective	Benchmark Statement
Life and Environmental Sciences	Discover how each organism meets its basic needs for water, nutrients, protections and energy in order to survive.

Performance Indicator
<ol style="list-style-type: none"> 1. Illustrate how living things can be sorted into groups in many ways. 2. Categorize populations of organisms into groups of producers, consumers and decomposers.

Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

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

Strand: Life and Environmental Science

Diocesan Standard Terra Nova Objective	Benchmark Statement
Life and Environmental Sciences	Investigate how organisms, especially plants, respond to both internal cues (the need for water) and external cues (changes in the environment).

Performance Indicator		
<ol style="list-style-type: none"> 1. Observe how internal and external cues influence behavior. 2. Explain how organisms are affected by day and night. 3. Recognize all organisms cause changes in their environments. 		
Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

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

Strand: Life and Environmental Science

Diocesan Standard Terra Nova Objective	Benchmark Statement
Life and Environmental Science	Illustrate the different ways that organisms grow through life stages and survive to produce new members of their type.

Performance Indicator		
<ol style="list-style-type: none"> 1. Observe that all organisms are composed of cells. 2. Discover how human organisms have interacting systems. 3. Investigate how some living organisms are so small we can only see them through a microscope. 4. Illustrate that plants and animals have life cycles that include birth, growth, reproduction, and death. 5. Identify that some characteristics are inherited in various combinations from parents. 		

Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

Content Area: Science
 Grade Range: Third Grade
 Section/Heading: 3.F.4

Strand: Life and Environmental Science

Diocesan Standard Terra Nova Objective	Benchmark Statement
Life and Environmental Science	Develop explanations for the connections among living and nonliving things in various environments.

Performance Indicator
<ol style="list-style-type: none"> 1. Observe that a population consists of all organisms living together at a given place and time. 2. Investigate that an ecosystem is composed of all populations of living organisms. 3. Observe how humans can pollute ecosystems, but that this can be prevented or resolved.

Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

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

Strand: Science Applications

Diocesan Standard Terra Nova Objective	Benchmark Statement
Science Applications	Identify the technology used by someone employed in a job or position, particularly in Missouri, and explain how the technology helps.

Performance Indicator		
1. Discover how machines have brought changes in the work place.		
Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

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

Strand: Science Applications

Diocesan Standard Terra Nova Objective	Benchmark Statement
Science Applications	Determine what science discoveries have led to changes in technologies that are being used in the workplace by someone employed locally.

Performance Indicator		
1. Identify how people use technology to solve problems.		
Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

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

Strand: Science Applications

Diocesan Standard Terra Nova Objective	Benchmark Statement
Science Applications	Ask questions to find answers about how devices and machines were invented and produced.

Performance Indicator		
1. Explain scientific contributions of people.		
Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

Content Area: Science
 Grade Range: Third Grade
 Section/Heading: 3.H.1

Strand: Social and Personal Perspectives

Diocesan Standard Terra Nova Objective	Benchmark Statement	
Social and Personal Perspectives	Describe how science and technology have helped, and in some cases hindered, progress in providing better food, more rapid information, quicker and safer transportation and more effective health care	
Performance Indicator		
<ol style="list-style-type: none"> 1. Identify how astronomers use technology. 2. Demonstrate that some substances can damage the body and how it functions. 		
Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

Content Area: Science
 Grade Range: Third Grade
 Section/Heading: 3.H.2

Strand: Social and Personal Perspectives

Diocesan Standard Terra Nova Objective	Benchmark Statement
Social and Personal Perspectives	Identify local and state issues that are helped by science and technology and explain how science and technology can also cause a problem.

Performance Indicator		
1. Demonstrate new ideas and inventions that continue to affect people.		
Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

Content Area: Science
 Grade Range: Third Grade
 Section/Heading: 3.H.3

Strand: Social and Personal Perspectives

Diocesan Standard Terra Nova Objective	Benchmark Statement
Social and Personal Perspectives	Show how science has contributed to meeting personal needs, including hygiene, nutrition, exercise, safety, and health care.

Performance Indicator		
<ol style="list-style-type: none"> 1. Explain how science has contributed to nutrition knowledge. 2. Demonstrate that rest, exercise and good nutrition are important to the maintenance and improvement of health. 		
Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

Content Area: Science
 Grade Range: Third Grade
 Section/Heading: 3.H.4

Strand: Social and Personal Perspectives

Diocesan Standard Terra Nova Objective	Benchmark Statement
Social and Personal Perspectives	Develop a list of issues that citizens must make decisions about and describe a strategy for becoming informed about the science behind these issues.

Performance Indicator		
1. Explain how people use technology to solve problems of water pollution and filtration.		
Suggested Activities	Assessment	Resources