

Diocese of Jefferson City Curriculum Guide

Content Area: Science
 Grade Range: First Grade
 Section/Heading: 1.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 studied.

Performance Indicators		
1. Pose and solve problems.		
Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

Content Area: Science
 Grade Range: First Grade
 Section/Heading: 1.A.2

Strand: Science Connections

Diocesan Standard Terra Nova Objective	Benchmark Statement
Science Connections	Incorporate prior knowledge into present subject matter to better understand the concept being taught.

Performance Indicator		
1. Collect and organize data.		
Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

Content Area: Science
 Grade Range: First Grade
 Section/Heading: 1.A.4

Strand: Science Connections

Diocesan Standard Terra Nova Objective	Benchmark Statement
Science Connections	Decide which science themes are important when studying science based problems.

Performance Indicator		
1. Explore themes of constancy, change and measurement.		
Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

Content Area: Science
 Grade Range: First Grade
 Section/Heading: 1.A.5

Strand: Science Connections

Diocesan Standard Terra Nova Objective	Benchmark Statement
Science Connections	Decide what changes over time are occurring or have occurred when studying a science problem.

Performance Indicator		
<ol style="list-style-type: none"> 1. Observe changes in the environment. 2. See that through our care of our environment, plants and animals we express our love for God. 		
Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

Content Area: Science
 Grade Range: First Grade
 Section/Heading: 1.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.

Performance Indicator		
1. Understand and demonstrate that people can choose science as a career or hobby.		
Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

Content Area: Science
 Grade Range: First Grade
 Section/Heading: 1.C.1

Strand: Science Inquiry

Diocesan Standard Terra Nova Objective	Benchmark Statement
Science Inquiry	Use science vocabulary to ask questions about objects, organisms, and events being studied.

Performance Indicator		
1. Make and share observations to help answer questions.		
Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

Content Area: Science
 Grade Range: First Grade
 Section/Heading: 1.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		
1. Measure objects in their environment.		
Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

Content Area: Science
 Grade Range: First Grade
 Section/Heading: 1.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/or various other menus to display their answers.

Performance Indicator
1. Explain that in science, it is helpful to work with a team and share findings.

Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

Content Area: Science
 Grade Range: First Grade
 Section/Heading: 1.D.1

Strand: Physical Science

Diocesan Standard Terra Nova Objective	Benchmark Statement
Physical Science	Understand that objects are made of more than one substance, by observing, describing and measuring the properties of earth materials, including properties of size, weight, shape, color, temperature, and the ability to react with other substances.

Performance Indicator
1. Observe and describe the differences in color and water. 2. Observe and describe characteristics of water and air.

Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

Content Area: Science
 Grade Range: First Grade
 Section/Heading: 1.D.2

Strand: Physical Science

Diocesan Standard Terra Nova Objective	Benchmark Statement
Physical Science	Group and/or classify objects and substances based on the properties of earth materials.

Performance Indicator		
.....1. Classify and sort objects according to color and buoyancy.		
Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

Content Area: Science
 Grade Range: First Grade
 Section/Heading: 1.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 and describe various states of water.		
Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

Content Area: Science
 Grade Range: First Grade
 Section/Heading: 1.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. Observe changes in color, water and air. 2. Observe and record changes in color and water properties, including absorption and buoyancy.

Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

Content Area: Science
 Grade Range: First Grade
 Section/Heading: 1.D.5

Strand: Physical Science

Diocesan Standard Terra Nova Objective	Benchmark Statement
Physical Science	Construct simple models of what is happening to materials and substances undergoing change, using simple instruments or tools to aid observation and collect data.

Performance Indicator		
.....1. Construct models relating to color and life cycles.		
Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

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

Strand: Earth and Space Science

Diocesan Standard Terra Nova Objective	Benchmark Statement
Earth and Space Science	Develop descriptions of the land and water masses of the earth and of Missouri's rocks and minerals, using the common vocabulary of earth and space science.

Performance Indicator
.....1. Describe the relationship of the oceans and surface of the earth.

Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

Content Area: Science
 Grade Range: First Grade
 Section/Heading: 1.E.5

Strand: Earth and Space Science

Diocesan Standard Terra Nova Objective	Benchmark Statement
Earth and Space Science	Describe the weather commonly found in Missouri in terms of clouds, temperature, humidity, and forms of precipitation, and the changes that occur over time including seasonal changes.

Performance Indicator		
<ol style="list-style-type: none"> 1. Observe and describe types of weather in Missouri. 2. Identify the four seasons and changes that occur within each season. 		
Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

Content Area: Science
 Grade Range: First Grade
 Section/Heading: 1.E.6

Strand: Earth and Space Science

Diocesan Standard Terra Nova Objective	Benchmark Statement
Earth and Space Science	Using the science themes, find patterns and cycles in the earth’s daily, yearly and long term changes.

Performance Indicator		
<ol style="list-style-type: none"> 1. Observe changes in clouds and the effect that wind has on weather. 2. Observe daily and long term weather patterns. 		
Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

Content Area: Science
 Grade Range: First Grade
 Section/Heading: 1.E.7

Strand: Earth and Space Science

Diocesan Standard Terra Nova Objective	Benchmark Statement
Earth and Space Science	Describe resources used in the home, community and nation as a whole.

Performance Indicator		
<ol style="list-style-type: none"> 1. Explain the use of weather balloons. 2. Identify objects within the home, community and nation that have resulted from space exploration. 		
Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

Content Area: Science
 Grade Range: First Grade
 Section/Heading: 1.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. Explain how plants and animals respond to different environments. 2. Explain how plants and animals respond to human presence within the environment.

Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

Content Area: Science
 Grade Range: First Grade
 Section/Heading: 1.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 various stages in life cycles of plants, insects and animals. 2. Observe that organisms alive today may resemble extinct organisms.

Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

Content Area: Science
 Grade Range: First Grade
 Section/Heading: 1.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 connections among plants, animals, and non-living things. 2. Describe differences between living and non-living things. 3. Group animals and plants by their characteristics. 		
Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

Content Area: Science
 Grade Range: First Grade
 Section/Heading: 1G.4

Strand: Science Applications

Diocesan Standard Terra Nova Objective	Benchmark Statement
Science Applications	Identify the combinations of simple machines in a device used in the home, the workplace, or elsewhere in the community, to make or repair things, or to move goods or people.

Performance Indicator		
<ol style="list-style-type: none"> 1. Identify weather instruments used in the home. 2. Discuss various uses of devices used in the home, the workplace or community and how they help our society. 		
Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

Content Area: Science
 Grade Range: First Grade
 Section/Heading: 1.G.5

Strand: Science Applications

Diocesan Standard Terra Nova Objective	Benchmark Statement
Science Applications	Find answers about how devices and machines were invented and produced.

Performance Indicator		
.....1. Identify scientists and their inventions.		
Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

Content Area: Science
 Grade Range: First Grade
 Section/Heading: 1.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. Show responsibility for own basic needs and for their communities. 2. Recognize that food, shelter, clothing, safety and security are basic human needs.

Suggested Activities	Assessment	Resources