

Diocese of Jefferson City Curriculum Guide

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

Strand: Science Connections

Diocesan Standard Terra Nova Objective	Benchmark Statement	
Science Connections	Decide what data can be collected to determine the most useful explanations when investigating a science-related problem.	
Performance Indicator		
<ol style="list-style-type: none"> 1. Collect, organize and interpret data to provide an explanation. 2. Understand that stories of the Bible show us God’s creation and love for our world. 		
Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

Content Area: Science
 Grade Range: Second Grade
 Section/Heading: 2.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
<ol style="list-style-type: none"> 1. Understand and demonstrate that people have made many contributions throughout history of science and technology. 2. Understand and demonstrate that science and technology have been practiced by people for a long time.

Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

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

Strand: Nature of Science

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

Performance Indicator		
1. Understand and demonstrate that science and technology continue to change over time.		
Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

Content Area: Science
 Grade Range: Second Grade
 Section/Heading: 2.C.2

Strand: Science Inquiry

Diocesan Standard Terra Nova Objective	Benchmark Statement
Science Inquiry	Use the science content being learned to ask questions, plan investigations, make observations, make predictions and offer explanations.

Performance Indicator
1. Compare and contrast objects and events and communicate findings.

Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

Content Area: Science
 Grade Range: Second Grade
 Section/Heading: 2.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. Identify a simple problem, test a possible solution to the problem and communicate results. 2. Demonstrate that instruments can be used to extend the senses. 		
Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

Content Area: Science
 Grade Range: Second Grade
 Section/Heading: 2.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		
1. Recognize that instructions that others can follow in carrying out a procedure need to be clearly stated.		
Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

Content Area: Science
 Grade Range: Second Grade
 Section/Heading: 2.C.7

Strand: Science Inquiry

Diocesan Standard Terra Nova Objective	Benchmark Statement
Science Inquiry	Support conclusions with logical arguments.

Performance Indicator
1. Explain that learning can come from careful observation and simple experiments.

Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

Content Area: Science
 Grade Range: Second Grade
 Section/Heading: 2.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. Compare and contrast objects and events and communicate findings of properties of earth materials.		
Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

Content Area: Science
 Grade Range: Second Grade
 Section/Heading: 2.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
<ol style="list-style-type: none"> 1. Observe changes due to heat energy. 2. Observe various states of water.

Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

Content Area: Science
 Grade Range: Second Grade
 Section/Heading: 2.D.8

Strand: Physical Science

Diocesan Standard Terra Nova Objective	Benchmark Statement
Physical Science	Ask questions and make observations to discover the differences between substances that can be touched (matter) and substances that cannot be touched (forms of energy, light, heat, electricity, sound and magnetism).

Performance Indicator
<ol style="list-style-type: none"> 1. Compare and contrast how magnets attract and repel a variety of objects. 2. Recognize that objects can be moved by magnetic force through a variety of substances. 3. Recognize that sound vibrations travel through different materials. 4. Conduct experiments using magnets, sound, light and energy.

Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

Content Area: Science
 Grade Range: Second Grade
 Section/Heading: 2.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
<ol style="list-style-type: none"> 1. Observe differences in rocks, minerals and soils. 2. Correctly use the vocabulary for rocks, minerals and soils.

Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

Content Area: Science
 Grade Range: Second Grade
 Section/Heading: 2.E.2

Strand: Earth and Space Science

Diocesan Standard Terra Nova Objective	Benchmark Statement
Earth and Space Science	Show that earth materials have different physical and chemical properties, including the properties of soils found in Missouri.

Performance Indicator		
1. Observe and classify properties of soils and rocks.		
Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

Content Area: Science
 Grade Range: Second Grade
 Section/Heading: 2.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		
1. Identify objects in space.		
Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

Content Area: Science
 Grade Range: Second Grade
 Section/Heading: 2.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		
<ol style="list-style-type: none"> 1. Observe changes in natural environment. 2. Observe daily and long term climate patterns. 		
Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

Content Area: Science
 Grade Range: Second Grade
 Section/Heading: 2.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 how energy affects everyday life. 2. Explain how people use resources to improve life. 3. 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: Second Grade
 Section/Heading: 2.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. Discover how the human body is composed of different systems serving various purposes. 2. Draw and label how food chains show living things dependent on each other. 		
Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

Content Area: Science
 Grade Range: Second Grade
 Section/Heading: 2.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. Discover how environmental changes such as the weather and seasons influence the life and death of animals and plants. 2. Discover how man-made changes in the environment influence the life and death of animals and plants. 3. Identify how an organism’s patterns of behavior are related to its environment. 		
Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

Content Area: Science
 Grade Range: Second Grade
 Section/Heading: 2.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 organisms alive today may resemble extinct organisms. 2. Identify how life has continued on earth for a very long time. 3. Describe life cycles of plants, insects and animals.

Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

Content Area: Science
 Grade Range: Second Grade
 Section/Heading: 2.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. Group animals and plants by their characteristics. 2. Observe that living things are part of a system and are interdependent with their living and non-living surroundings. 3. Discover that natural resources are limited and must be used very carefully. 4. Observe how human influences have initiated change in earth environments. 		
Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

Content Area: Science
 Grade Range: Second Grade
 Section/Heading: 2.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
<ol style="list-style-type: none"> 1. Explain how technology has helped people. 2. Conduct a problem solving investigation.

Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

Content Area: Science
 Grade Range: Second Grade
 Section/Heading: 2.G.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 and explain various tools of science and their uses. 2. Discuss various uses of devices used in the home, workplace or community and how they help our society. 		
Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

Content Area: Science
 Grade Range: Second Grade
 Section/Heading: 2.G.5

Strand: Science Applications

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

Performance Indicator
<ol style="list-style-type: none"> 1. Explain scientific contributions of people. 2. Explain the outcomes of their investigation.

Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

Content Area: Science
 Grade Range: Second Grade
 Section/Heading: 2.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. Demonstrate how an individual's and a population's quality of life and ability to survive are affected by environmental factors. 2. Demonstrate that drugs can have positive or negative effects depending upon how they are used.

Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

Content Area: Science
 Grade Range: Second Grade
 Section/Heading: 2.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. Relate scientific knowledge to safety and health issues. 2. Demonstrate that balanced nutrition, exercise and a healthy life style are essential to good health. 3. Recognize that our bodies are created by God and should be well cared for. 		
Suggested Activities	Assessment	Resources

Diocese of Jefferson City Curriculum Guide

Content Area: Science
 Grade Range: Second Grade
 Section/Heading: 2.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. Identify problems related to noise pollution or other science issues.		
Suggested Activities	Assessment	Resources