

## Diocese of Jefferson City Curriculum Guide

Content Area: Science  
 Grade Range: Kindergarten  
 Section/Heading: K.A.1

Strand: Science Connections

| Diocesan Standard<br>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: Kindergarten  
 Section/Heading: K.A.2

Strand: Science Connections

| Diocesan Standard<br>Terra Nova Objective | Benchmark Statement   |
|---|---|
| Science Connections                       | Incorporate prior knowledge into present subject matter to better understand concepts being taught. |

| Performance Indicator   |            |           |
|---|------------|-----------|
| 1. Sort, graph, draw pictures, and compare and share information. |            |           |
| Suggested Activities  | Assessment | Resources |
|   |            |           |

## Diocese of Jefferson City Curriculum Guide

Content Area: Science  
 Grade Range: Kindergarten  
 Section/Heading: K.A.4

Strand: Science Connections

| Diocesan Standard<br>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: Kindergarten  
 Section/Heading: K.A.5

Strand: Science Connections

| Diocesan Standard<br>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"> <li>1. Observe changes in the environment.</li> <li>2. Identify that life and all creation are God’s gift to us.</li> <li>3. Orally identify changes that occur when studying a problem.</li> </ol> |

| Suggested Activities | Assessment | Resources |
|----------------------|------------|-----------|
|                      |            |           |

## Diocese of Jefferson City Curriculum Guide

Content Area: Science  
 Grade Range: Kindergarten  
 Section/Heading: K.B.1

Strand: Nature of Science

| Diocesan Standard<br>Terra Nova Objective | Benchmark Statement  |
|---|--|
| Nature of Science                         | Understand that science is ongoing and inventive and that scientific understandings have changed over time as new evidence is found. |

| Performance Indicator   |            |           |
|---|------------|-----------|
| <ol style="list-style-type: none"> <li>1. Demonstrate and explain that science is important in our lives.</li> <li>2. Demonstrate that science is interesting through the use of experiments and investigations.</li> </ol> |            |           |
| Suggested Activities  | Assessment | Resources |
|   |            |           |

## Diocese of Jefferson City Curriculum Guide

Content Area: Science  
 Grade Range: Kindergarten  
 Section/Heading: K.C.8

Strand: Science Inquiry

| Diocesan Standard<br>Terra Nova Objective | Benchmark Statement   |
|---|---|
| Science Inquiry                           | Ask additional questions that might help focus or further an investigation. |

| Performance Indicator   |
|---|
| <ol style="list-style-type: none"> <li>1. Ask questions and make predictions about objects, organisms and events in their environment.</li> <li>2. Demonstrate that science involves asking questions and looking for actions.</li> </ol> |

| Suggested Activities | Assessment | Resources |
|----------------------|------------|-----------|
|                      |            |           |

## Diocese of Jefferson City Curriculum Guide

Content Area: Science  
 Grade Range: Kindergarten  
 Section/Heading: K.D.2

Strand: Physical Science

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

| Performance Indicator              |            |           |
|------------------------------------|------------|-----------|
| 1. Identify water and land masses. |            |           |
| Suggested Activities               | Assessment | Resources |
|                                    |            |           |

## Diocese of Jefferson City Curriculum Guide

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

Strand: Physical Science

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

| Performance Indicator                  |            |           |
|--|------------|-----------|
| 1. Identify liquids, solids and gases. |            |           |
| Suggested Activities                   | Assessment | Resources |
|  |            |           |

## Diocese of Jefferson City Curriculum Guide

Content Area: Science  
 Grade Range: Kindergarten  
 Section/Heading: K.D.4

Strand: Physical Science

| Diocesan Standard<br>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 the weather. |            |           |
| Suggested Activities               | Assessment | Resources |
|                                    |            |           |

## Diocese of Jefferson City Curriculum Guide

Content Area: Science  
 Grade Range: Kindergarten  
 Section/Heading: K.D.5

Strand: Physical Science

| Diocesan Standard<br>Terra Nova Objective | Benchmark Statement   |
|---|---|
| Physical Science                          | Construct simple models of what is happening to materials and substances undergoing change (use simple instruments or tools to aid observation and collect data). |

| Performance Indicator  |
|--|
| 1. Make models of earth and simple weather instruments.<br>2. Make simple weather instruments. |

| Suggested Activities | Assessment | Resources |
|----------------------|------------|-----------|
|                      |            |           |

## Diocese of Jefferson City Curriculum Guide

Content Area: Science  
 Grade Range: Kindergarten  
 Section/Heading: K.D.6

Strand: Physical Science

| Diocesan Standard<br>Terra Nova Objective | Benchmark Statement   |
|---|---|
| Physical Science                          | Observe and describe physical events of objects at rest or in motion. |

| Performance Indicator   |            |           |
|---|------------|-----------|
| 1. Observe and experiment with objects in motion and at rest. |            |           |
| Suggested Activities  | Assessment | Resources |
|   |            |           |

## Diocese of Jefferson City Curriculum Guide

Content Area: Science  
 Grade Range: Kindergarten  
 Section/Heading: K.D.7

Strand: Physical Science

| Diocesan Standard<br>Terra Nova Objective | Benchmark Statement  |
|---|--|
| Physical Science                          | Observe and describe physical events involving objects and developing record keeping systems to follow these events. |

| Performance Indicator                  |            |           |
|--|------------|-----------|
| 1. Describe, measure and keep records. |            |           |
| Suggested Activities                   | Assessment | Resources |
|  |            |           |

## Diocese of Jefferson City Curriculum Guide

Content Area: Science  
 Grade Range: Kindergarten  
 Section/Heading: K.E.1

Strand: Earth and Space Science

| Diocesan Standard<br>Terra Nova Objective | Benchmark Statement   |
|---|---|
| Earth and Space Science                   | Investigate that earth's materials are composed of rocks and soils. |

| Performance Indicator  |            |           |
|--|------------|-----------|
| <ol style="list-style-type: none"> <li>1. Observe sand, earth and rock samples.</li> <li>2. Correctly use the vocabulary for rocks, minerals and soils.</li> </ol> |            |           |
| Suggested Activities   | Assessment | Resources |
|  |            |           |

## Diocese of Jefferson City Curriculum Guide

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

Strand: Earth and Space Science

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

| Performance Indicator                                    |
|--|
| 1. Identify differences in sand, earth and rock samples. |

| Suggested Activities | Assessment | Resources |
|----------------------|------------|-----------|
|                      |            |           |

## Diocese of Jefferson City Curriculum Guide

Content Area: Science  
 Grade Range: Kindergarten  
 Section/Heading: K.E.3

Strand: Earth and Space Science

| Diocesan Standard<br>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 earth formations.<br>2. Distinguish between land and water. |            |           |
| Suggested Activities  | Assessment | Resources |
|   |            |           |

## Diocese of Jefferson City Curriculum Guide

Content Area: Science  
 Grade Range: Kindergarten  
 Section/Heading: K.E.4

Strand: Earth and Space Science

| Diocesan Standard<br>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"> <li>1. Identify the sun, moon and stars.</li> <li>2. Understand that God created day and night.</li> </ol> |

| Suggested Activities | Assessment | Resources |
|----------------------|------------|-----------|
|                      |            |           |

## Diocese of Jefferson City Curriculum Guide

Content Area: Science  
 Grade Range: Kindergarten  
 Section/Heading: K.E.5

Strand: Earth and Space Science

| Diocesan Standard<br>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"> <li>1. Describe weather changes.</li> <li>2. Identify four seasons and changes that occur within those seasons.</li> </ol> |

| Suggested Activities | Assessment | Resources |
|----------------------|------------|-----------|
|                      |            |           |

## Diocese of Jefferson City Curriculum Guide

Content Area: Science  
 Grade Range: Kindergarten  
 Section/Heading: K.E.6

Strand: Earth and Space Science

| Diocesan Standard<br>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 daily and long-term weather patterns. |            |           |
| Suggested Activities                             | Assessment | Resources |
|  |            |           |

## Diocese of Jefferson City Curriculum Guide

Content Area: Science  
 Grade Range: Kindergarten  
 Section/Heading: K.E.7

Strand: Earth and Space Science

| Diocesan Standard<br>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"> <li>1. Use simple weather instruments.</li> <li>2. Identify everyday items we use which are made of materials gathered from space exploration (Velcro, cell phones, etc.).</li> </ol> |

| Suggested Activities | Assessment | Resources |
|----------------------|------------|-----------|
|                      |            |           |

## Diocese of Jefferson City Curriculum Guide

Content Area: Science  
 Grade Range: Kindergarten  
 Section/Heading: K.E.8

Strand: Earth and Space Science

| Diocesan Standard<br>Terra Nova Objective | Benchmark Statement  |
|---|--|
| Earth and Space Science                   | Illustrate human resources used in mining, forestry, farming and manufacturing in Missouri and elsewhere in the world. |

| Performance Indicator  |            |           |
|--|------------|-----------|
| <ol style="list-style-type: none"> <li>1. Identify the importance of water.</li> <li>2. Give examples of consumable resources that come from natural resources (i.e. paper from trees).</li> </ol> |            |           |
| Suggested Activities   | Assessment | Resources |
|  |            |           |

## Diocese of Jefferson City Curriculum Guide

Content Area: Science  
 Grade Range: Kindergarten  
 Section/Heading: K.F.2

Strand: Life and Environmental Science

| Diocesan Standard<br>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                |            |           |
|--------------------------------------|------------|-----------|
| 1. Conduct experiments using plants. |            |           |
| Suggested Activities                 | Assessment | Resources |
|                                      |            |           |

## Diocese of Jefferson City Curriculum Guide

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

Strand: Life and Environmental Science

| Diocesan Standard<br>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                                    |            |           |
|--|------------|-----------|
| 1. Describe life cycles of plants, insects, and animals. |            |           |
| Suggested Activities                                     | Assessment | Resources |
| Match adult and baby animals.                            |            |           |

## Diocese of Jefferson City Curriculum Guide

Content Area: Science  
 Grade Range: Kindergarten  
 Section/Heading: K.F.4

Strand: Life and Environmental Science

| Diocesan Standard<br>Terra Nova Objective | Benchmark Statement  |
|---|--|
| Life and Environmental Science            | Develop explanations for the connections among living and non-living things in various environments. |

| Performance Indicator   |            |           |
|---|------------|-----------|
| 1. Describe differences between living and non-living things. |            |           |
| Suggested Activities  | Assessment | Resources |
| Sort living and non-living things.                            |            |           |

## Diocese of Jefferson City Curriculum Guide

Content Area: Science  
 Grade Range: Kindergarten  
 Section/Heading: K.G.1

Strand: Science Applications

| Diocesan Standard<br>Terra Nova Objective | Benchmark Statement  |
|---|--|
| Science Applications                      | Identify the technology used by someone employed in a job or position in Missouri or the broader community and explain how the technology helps. |

| Performance Indicator   |            |           |
|---|------------|-----------|
| 1. Discuss types of science tools that are used in exploration. |            |           |
| Suggested Activities  | Assessment | Resources |
|   |            |           |

## Diocese of Jefferson City Curriculum Guide

Content Area: Science  
 Grade Range: Kindergarten  
 Section/Heading: K.H.2

Strand: Social and Personal Perspectives

| Diocesan Standard<br>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 cause a problem. |

| Performance Indicator  |            |           |
|--|------------|-----------|
| <ol style="list-style-type: none"> <li>1. Identify which objects can be recycled.</li> <li>2. Identify the reasons why objects should be recycled</li> <li>3. Identify ways we can care for God’s creation.</li> </ol> |            |           |
| Suggested Activities   | Assessment | Resources |
|  |            |           |

## Diocese of Jefferson City Curriculum Guide

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

Strand: Social and Personal Perspectives

| Diocesan Standard<br>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   |            |           |
|---|------------|-----------|
| 1. Recognize that food, shelter, clothing, safety and security are basic human needs. |            |           |
| Suggested Activities  | Assessment | Resources |
|   |            |           |