

Integrating Science and Technology  
and  
Catholic Curriculum Maps

**Grade 2**

**Understanding Life Systems Strand**

**Growth and Changes  
In  
Animals**



**Catholic Curriculum Corporation  
Central and Western Region**

**November, 2008**

**Understanding Life Systems Strand  
Grade 2**

**Unit At-A-Glance**

<p><b>Catholic Social Teaching:</b> <b>Essential Question:</b> <b>OCSGE:</b></p>	<p>Promotion of Peace How are we members of God’s family? Respects the environment and uses resources wisely. CGE7i Integrates faith with life. CGE1i</p>
<p><b>Topic:</b></p>	<p>Growth and Changes in Animals</p>
<p><b>Unit Guiding Question:</b></p>	<p>Why are all animals in God’s creation important and how can we protect them and the places where they live?</p>
<p><b>Unit Culminating Task:</b> Students will create a television or radio commercial to reflect the unit guiding question:</p> <ul style="list-style-type: none"> <li>• Why are animals important?</li> <li>• How can people in the school and community protect animals and the places where they live?</li> </ul>	
<p><b>Essential Understandings</b></p>	
<p><b>Catholic Curriculum Map:</b> <i>Essential Question(s) &amp; Links</i></p> <p><b>Science and Technology:</b> <i>Fundamental Concept(s)</i></p> <p><b>Science and Technology:</b> <i>Big Ideas and Overall Expectations</i></p> <p><b>Science and Technology:</b> <i>Scientific Inquiry Skill</i></p> <p><b>Science and Technology:</b> <i>Expectation Tags, Guiding Questions and Specific Expectations</i></p>	<p>How do I work with God’s gifts?</p> <ul style="list-style-type: none"> <li>• Recognize that the human person is the greatest of God’s creatures.</li> <li>• Demonstrate and understanding of life as a gift and identify the responsibility that results from that gift.</li> </ul> <p>Sustainability and Stewardship and Structure and Function</p> <ul style="list-style-type: none"> <li>• Animals have distinct characteristics. (OE2, 3)</li> <li>• Humans are animals. (OE1,2, 3)</li> <li>• There are similarities and differences among different kinds of animals. (OE2)</li> <li>• Humans need to protect animals and the places where they live. (OE1)</li> <li>• How do animals meet the needs of living things, including humans? (SE3.3)</li> <li>• Why should humans protect animals and the places where they live? (SE3.3)</li> </ul> <p>Research</p> <p><b>Relating Science and Technology to Society and the Environment</b></p> <ul style="list-style-type: none"> <li>• What are the positive and negative impacts that animals have on humans (society) and the environment and how can these be minimized or enhanced? (SE1.1)</li> <li>• What are the positive and negative impact that different kinds of human activity can have on animals and where they live and how can these be minimized or enhanced?(SE1.2)</li> </ul>

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<p><b>Language Expectations:</b></p>	<p><b>Developing Investigation and Communication Skills</b></p> <ul style="list-style-type: none"> <li>• Observe and compare the physical characteristics and the behavioural characteristics of a variety of animals (SE 2.2)</li> <li>• Investigate the life cycle of a variety of animals using a variety of methods and resources (SE 2.3)</li> <li>• Observe and compare changes in appearance and activity of animals as they go through a complete life cycle (SE 2.4)</li> <li>• Use scientific inquiry/research skills to investigate the basic needs, characteristics, behaviour, and adaptations of an animal (SE2.6)</li> <li>• Use a variety of forms to communicate with different audiences and for a variety of purposes.(e.g. create a diorama to illustrate the basic needs of plants and animals including humans. (SE 2.8)</li> </ul> <p><b>Understanding Basic Concepts</b></p> <ul style="list-style-type: none"> <li>• Identify and describe major physical characteristics of different types of animals (3.1)</li> <li>• Identify ways in which animals are helpful to, and ways in which they meet the needs of living things, including humans, to explain why humans should protect animals and the places where they live (3.3)</li> </ul> <p><b>Writing:</b></p> <ul style="list-style-type: none"> <li>• Generate, gather and organize ideas and information to write for an intended purpose and audience. (OE1)</li> </ul> <p><b>Oral Communication:</b></p> <ul style="list-style-type: none"> <li>• Demonstrate an understanding of appropriate speaking behavior in a variety of situations, including paired sharing and small-and large-group discussion.(SE2.2)</li> <li>• Communicate ideas, opinions, and information orally in a clear, coherent manner using simple but appropriate organizational patterns. (SE2.3)</li> </ul>
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**Unit Overview**

NOTE: Teachers will need to adjust the suggestions to address the learning needs of their students.

Subtask	Lesson / Time	Essential Understandings	Assessment	Resources
1	1.1 The Creation Story  1.2 Making a Collage (40 minutes x 2)	How do I work with God’s gifts? Recognize that the human person is the greatest of God’s creatures. Demonstrate and understanding of life as a gift and identify the responsibility that results from that gift. Animals have distinct characteristics. (OE2, 3) Humans are animals. (OE1, 2, 3) There are similarities and differences among different kinds of animals. (OE2) SE 3.1	Direct observation; Question and answer (oral); Written responses in learning logs; Collages and student observations	Chart paper, markers, magazines, glue, scissors, large cartridge paper, learning logs

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		<p>Oral Communication: Demonstrate an understanding of appropriate speaking behavior in a variety of situations, including paired sharing and small-and large-group discussion. (SE2.2) Communicate ideas, opinions, and information orally in a clear, coherent manner using simple but appropriate organizational patterns. (SE2.3)</p>		
2	<p>Animal Characteristics Learning Centers 5 x 40 minutes</p> <p>2.1 Introduction to Animal Characteristics Learning Centers</p> <p>2.2 Let's Read About Animals!</p> <p>2.3 Animal Characteristics Sort</p> <p>2.4 Comparing Animals and humans</p> <p>2.5 The Creation Story</p>	<p>Animals have distinct characteristics. (OE2, 3) Humans are animals. (OE1,2, 3) There are similarities and differences among different kinds of animals. (OE2) Humans need to protect animals and the places where they live. (OE1)</p> <p>SE 1.1, 1.2, 2.6, 2.8, 3.3</p> <p>Writing: Generate, gather and organize ideas and information to write for an intended purpose and audience. (OE1)</p> <p>Oral Communication: Demonstrate an understanding of appropriate speaking behavior in a variety of situations, including paired sharing and small-and large-group discussion. (SE2.2) Communicate ideas, opinions, and information orally in a clear, coherent manner using simple but appropriate organizational patterns. (SE2.3)</p>	<p>Rating scale to be used for assessment of learning log at completion of centers; Direct observation-anecdotal</p>	<p>Rating scale for learning logs, class library of non-fiction books about animals, pictures of various characteristics of animals, chart, BLM 2.2, 2.3, 2.4a), 2.4b), 2.5 Primary Bibles, Learning logs</p>
3	<p>Animal Needs, Behaviors and Adaptations</p> <p>3.1 Note-taking (40 minutes)</p> <p>3.2 Nature Walk (40 minutes)</p>	<p>Animals have distinct characteristics. (OE2, 3) Humans are animals. (OE1,2, 3) There are similarities and differences among different kinds of animals. (OE2) Humans need to protect animals and the places where they live. (OE1)</p>	<p>Direct observation -anecdotal; Observation -checklist; Rating Scale; Learning logs</p>	<p>BLM6 Learning logs, permission letters bug catchers, containers for habitats, bags for collection, containers for habitats, materials collected on nature</p>

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	<p>3.3 Building Habitats (40 minutes)</p> <p>3.4 People Grow and Change (40 minutes)</p> <p>3.5 Animals Grow and Change -Life Cycles (40 minutes)</p>	<p>SE 1.1, 1.2, 2.2, 2.3, 2.4, 2.8, 3.3</p> <p>Writing: Generate, gather and organize ideas and information to write for an intended purpose and audience. (OE1)</p> <p>Oral Communication: Demonstrate an understanding of appropriate speaking behavior in a variety of situations, including paired sharing and small-and large-group discussion. (SE2.2)</p> <p>Communicate ideas, opinions, and information orally in a clear, coherent manner using simple but appropriate organizational patterns. (SE2.3)</p>		<p>walk to build habitats, students current picture of self and as baby, BLM7</p>
4	<p>The Importance of Animals</p> <p>4.1 Why are Animals Important to Humans (40 minutes)</p> <p>4.2 Some Animals are Endangered (40 minutes)</p> <p>4.3 Some Animals are Extinct (40minutes)</p> <p>4.4 My Interesting Animal (40minutes)</p>	<p>Animals have distinct characteristics. (OE2, 3)</p> <p>Humans are animals. (OE1,2, 3)</p> <p>There are similarities and differences among different kinds of animals. (OE2)</p> <p>Humans need to protect animals and the places where they live. (OE1)</p> <p>SE 1.1, 1.2, 2.2, 2.8 3.3</p> <p>Writing: Generate, gather and organize ideas and information to write for an intended purpose and audience. (OE1)</p> <p>Oral Communication: Demonstrate an understanding of appropriate speaking behavior in a variety of situations, including paired sharing and small-and large-group discussion. (SE2.2)</p> <p>Communicate ideas, opinions, and information orally in a clear, coherent manner using simple but appropriate organizational patterns. (SE2.3)</p>	<p>Direct Observation -anecdotal; Rating Scale</p>	<p>Learning logs, BLM 7,8; Rating scale</p>

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5	<p>Culminating Performance Task (40 minutes)</p> <p>5.1 Introduction to Culminating Performance Task (40 minutes)</p> <p>5.2 Presentation of Completed Task (40 minutes)</p>	<p>Animals have distinct characteristics. (OE2, 3)                  Humans are animals. (OE1,2, 3)                  There are similarities and differences among different kinds of animals. (OE2)                  Humans need to protect animals and the places where they live. (OE1)</p> <p>SE 1.1, 1.2, 2.2, 2.8, 3.3</p> <p>Writing:                  Generate, gather and organize ideas and information to write for an intended purpose and audience. (OE1)</p> <p>Oral Communication:                  Demonstrate an understanding of appropriate speaking behavior in a variety of situations, including paired sharing and small-and large-group discussion. (SE2.2)                  Communicate ideas, opinions, and information orally in a clear, coherent manner using simple but appropriate organizational patterns. (SE2.3)</p>	Rubric	BLM 9, rubric
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## **Understanding Life Systems Strand Grade 2**

### **Subtask 1: Introduction to Unit**

#### **Description**

To come to the understanding that the Creation Story is the story of God's Divine Plan of love and perfection. To provide the foundational understanding that God had a plan that was one of perfect order.

#### **Lesson 1.1 The Creation Story**

##### **Purpose**

To come to the understanding that the Creation Story is the story of God's Divine Plan of love and perfection. To provide the foundational understanding that God had a plan that was one of perfect order. To consider why God had such a plan and why God invites us and wants us to respect this order.

#### **Essential Understandings**

Catholic Curriculum Map Links:

- How do I work with God's gifts?
- Recognize that the human person is the greatest of God's creatures.
- Demonstrate and understanding of life as a gift and identify the responsibility that results from that gift.

Science and Technology:

- What are the positive and negative impacts that animals have on humans (society) and the environment and how can these be minimized or enhanced? (SE1.1)
- What are the positive and negative impact that different kinds of human activity can have on animals and where they live and how can these be minimized or enhanced?(SE1.2)
- What are the basic needs, characteristics, behavior and adaptations of different types of animals? (SE2)

Oral Communication:

- Demonstrate an understanding of appropriate speaking behavior in a variety of situations, including paired sharing and small-and large-group discussion. (SE2.2)

#### **Assessment for Learning**

Direct Observation – anecdotal; Learning logs

#### **Teacher Notes**

This lesson and lesson 1.2 will introduce the students to the Grade 2 Life Systems strand.

Each student will have a Learning Log that will be used to help them organize their thoughts and ideas throughout the entire unit. A notebook or duo-tang could be used for this log. Entries in the Learning Log may include a list of key ideas, personal reflections, a place to write questions that may arise, connections discovered, labeled diagrams and pictures etc.

Materials: Bibles (The Creation Story), student Learning Logs

## **Understanding Life Systems Strand**

### **Grade 2**

#### **Instruction**

##### **Time to Teach** (15 minutes)

- Read the Creation Story aloud to the class and have them visualize God creating the world.
- Tell students to reflect and answer the following questions in their learning logs:  
What did you notice about God's plan?  
God's Creation Story is one of perfection and love. As members of God's family what does God invite and want us to do? Give some examples.
- After students have had some time to reflect and record, have a class discussion sharing student's responses.

##### **Time to Practice** (15minutes)

- Students will reflect and record their responses to the following questions in their learning logs.  
What did you notice about God's plan?  
God's Creation Story is one of perfection and love. As members of God's family what does God invite and want us to do? Give some examples

##### **Time to Share** (10 minutes)

- Re-group. Ask students if they have any questions.
- Have a class discussion sharing student responses.

## **Understanding Life Systems Strand Grade 2**

### **Description**

To identify and create an awareness of the many different kinds of animals that God created and why

### **Lesson 1.2 Making A Collage**

#### **Purpose**

Students will brainstorm a list of a variety of animals created by God and will construct a collage to reflect their knowledge. To consider why God might have created specific animals with their unique characteristics.

#### **Essential Understandings**

Catholic Curriculum Map Links:

- How do I work with God's gifts?
- Recognize that the human person is the greatest of God's creatures.
- Demonstrate an understanding of life as a gift and identify the responsibility that results from that gift.

Science and Technology:

- What are the positive and negative impacts that animals have on humans (society) and the environment and how can these be minimized or enhanced? (SE1.1)
- What are the positive and negative impact that different kinds of human activity can have on animals and where they live and how can these be minimized or enhanced?(SE1.2)
- What are the basic needs, characteristics, behavior and adaptations of different types of animals? (SE2)

Oral Communication:

- Demonstrate an understanding of appropriate speaking behavior in a variety of situations, including paired sharing and small-and large-group discussion. (SE2.2)

#### **Assessment for Learning**

Direct Observation – anecdotal, learning logs, observation checklist

#### **Teacher Notes**

This lesson and lesson 1.2 will introduce the students to the Grade 2 Life Systems strand. This lesson could run over two working periods depending on classroom needs. Each student will have a Learning Log that will be used to help them organize their thoughts and ideas throughout this complete unit. A notebook or duo-tang could be used for this log. Entries in the Learning Log may include a list of key ideas, personal reflections, a place to write questions that may arise, connections discovered, labeled diagrams and pictures etc.

Materials: chart paper, markers, magazines, paper, glue, crayons, observation checklist

#### **Instruction**

**Time to Teach** (10 minutes)

Students will be directed to create a collage of different animals. In their learning logs they will create a chart listing the names of these animals and recording beside the name any unique characteristics/gifts that this animal has.

Students will be asked to consider why God gave various animals different characteristics to bring to the world. (i.e. a peacock's beauty, dogs can protect or be the eyes of a blind person, etc.) (5 minutes)

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#### **Time to Practice** (25 minutes x 2)

Students will cut out pictures of different kinds of animals and create a collage.

In their learning logs they will create a chart listing the names of the animals they cut out and any unique characteristics they have. Students will then consider and record why God gave animals different characteristics to bring to the world. (20 minutes)

#### **Time to Share** (5 minutes)

Re-group and answer any questions students may have.

Pose the question to generate discussion:

“When making your collage today, is there anything you learned about the similarities and/or differences between animals that you might like to share?”

Ask volunteers to share their charts and reflections in their learning logs.

## **Understanding Life Systems Strand Grade 2**

### **Subtask 2: Animal Characteristics Learning Centers**

#### **Description:**

Animal Characteristics – Learning Centers

#### **Lesson 2.1 Introduction to Animal Characteristic Learning Centers**

##### **Purpose**

In this lesson, students will be introduced to 4 centers that they will circulate through over a four day period. These centers will give students an opportunity to explore and identify characteristics that are similar and different among a variety of animals, describe characteristics that make animals distinct from people, recognize animals and their distinctiveness and identify animals as gifts from God. Students will have an opportunity to read critically the Creation Story as told in Genesis and consider the responsibilities that result from this gift.

##### **Essential Understandings**

Catholic Curriculum Map Links:

- How do I work with God's gifts?
- Recognize that the human person is the greatest of God's creatures.
- Demonstrate and understanding of life as a gift and identify the responsibility that results from that gift.

Science and Technology:

- What are the positive and negative impacts that animals have on humans (society) and the environment and how can these be minimized or enhanced? (SE1.1)
- What are the positive and negative impacts that different kinds of human activity can have on animals and where they live and how can these be minimized or enhanced?(SE1.2)
- What are the basic needs, characteristics, behavior and adaptations of different types of animals? (SE2)

##### **Assessment for Learning**

Use observation to identify student's ability to work in groups.

Provide feedback to student.

Use assessment information to identify the need for individual or small group instruction,

View each individual experience for assessment strategies for each particular center. (DI)

A rating scale will be used upon students' completion of responses and reflections in learning logs.

##### **Teacher Notes**

Learning centers will run for 4 days. The following lessons (2.2, 2.3, 2.4a), 2.4b) and 2.5, will outline the guidelines, expectations etc. for each centre. See individual lessons and Unit Overview for materials and resources required to prepare for each experience.

##### **Instruction**

###### **Time to Teach**

- Day one: Model expectations and materials at each center. (5 minutes)

###### **Time to Practice**

- Students will observe teachers modeling of expectations. (30 minutes)

###### **Time to Share**

- Ask students if they have any questions. (5 minutes)

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### **Description: Animal Characteristics – Learning Centers**

#### **Lesson 2.2 Let's Read About Animals**

##### **Purpose**

In this experience, students will be presented with a classroom library of non-fiction books about a variety of animals. Students will read and identify characteristics that are similar and different among a variety of animals - characteristics that make animals distinct from people and consider this distinctiveness as a gift from God to humans.

##### **Essential Understandings**

Catholic Curriculum Map Links:

- How do I work with God's gifts?
- Recognize that the human person is the greatest of God's creatures.
- Demonstrate and understanding of life as a gift and identify the responsibility that results from that gift.

Science and Technology:

- What are the positive and negative impacts that animals have on humans (society) and the environment and how can these be minimized or enhanced? (SE1.1)
- What are the positive and negative impact that different kinds of human activity can have on animals and where they live and how can these be minimized or enhanced?(SE1.2)
- What are the basic needs, characteristics, behavior and adaptations of different types of animals? (SE2)

##### **Assessment for Learning**

Direct Observation – anecdotal; Rating Scale at completion of all centres.

##### **Teacher Notes**

Materials: a library of non-fiction books on animals, learning logs, center card listing questions and points for consideration, BLM 1

##### **Instruction**

**Time to Teach** (5 minutes)

Day one: Send students to center and ask if there are any questions before beginning.

**Time to Practice** (25 minutes)

Students will read and observe the non-fiction books in their classroom library and will write an entry in their learning logs. Students will use BLM 2.2 as a guide: 1. Record any questions you may have about animals. 2. List some of their features that are the same, or different. 3. Draw a picture of one of the favorite animals you read about and label a part of that animal that is different or special. (E.g. a beaver's tail, a duck's feet) 3. Why do you think God made the animals of the earth so different?

**Time to Share** (10 minutes)

- Ask students if they have any questions.
- Ask students to share what they have learned today.

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BLM 2.2

Centre: Let's Read About Animals

Explore any books of your choice from our classroom animal library.

In your learning log complete the following:

- a) Record any questions you may have.
- b) List some features that are the same or different.
- c) Draw a picture of one of your favorite animals you read about.
- d) Label one part of that animal that is different or special.  
(e.g. a beavers tail, a duck's feet)
- e) Why do you think God made the animals of the earth so different?

## **Understanding Life Systems Strand Grade 2**

### **Lesson 2.3 Animal Characteristics Sort**

#### **Purpose**

In this experience, students will sort and match characteristics to animal groups. This experience will highlight the similarities and differences between various animals and help the students to consider how needs of animals may be similar or different to that of humans.

#### **Essential Understandings**

Catholic Curriculum Map Links:

- How do I work with God's gifts?
- Recognize that the human person is the greatest of God's creatures.
- Demonstrate and understanding of life as a gift and identify the responsibility that results from that gift.

Science and Technology:

- What are the positive and negative impacts that animals have on humans (society) and the environment and how can these be minimized or enhanced? (SE1.1)
- What are the positive and negative impact that different kinds of human activity can have on animals and where they live and how can these be minimized or enhanced?(SE1.2)
- What are the basic needs, characteristics, behavior and adaptations of different types of animals? (SE2)

#### **Assessment for Learning**

Direct Observation – anecdotal

Rating Scale at completion of all centres. Teacher Notes

Students will be given a chart of animal groups with labels of characteristics.

Students will match and sort the characteristics by pasting them under the appropriate label.

Materials: learning logs, glue, chart of animal groupings, pictures of animal characteristics, BLM2.3

#### **Instruction**

**Time to Teach** (5 minutes)

- Day one: Send students to center and ask if there are any questions before beginning.

**Time to Practice** (25 minutes)

- Students will sort and then paste pictures of specific animal characteristics under the appropriate animal groups in the charts given (e.g. insect chart, mammal chart, reptile chart, bird chart, etc)
- Students will record in their learning logs any connections they have discovered as per the questions posed on BLM 2.3. Students will reflect on ways that we need to protect animals.

**Time to Share** (10 minutes)

- Ask students if they have any questions.
- Ask students to share what they have learned today in a group discussion.

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**BLM 2.3**

Centre: Animal Characteristic Sort

Use the charts given (one for each animal type i.e. Birds, Reptiles, Mammals, etc.) and sort and paste the pictures of animals under the matching animal groups.

In your learning log write down anything that you noticed about the animals you sorted.

1. What was similar?
2. What was different?
3. How can we protect God's animals?

## Understanding Life Systems Strand Grade 2

### Lesson 2.4 Comparing Animals and Humans

#### Purpose

To help students discover that humans are animals who have the same basic needs as other animals. To encourage the students to reflect on ways that animals and humans impact each other positively and negatively. To recognize that the human person is the greatest of God's creatures and therefore has the responsibility of caring for all the animals of God's Creation. To consider how they can care for God's creatures.

#### Essential Understandings

Catholic Curriculum Map Links:

- How do I work with God's gifts?
- Recognize that the human person is the greatest of God's creatures.
- Demonstrate and understanding of life as a gift and identify the responsibility that results from that gift.

Science and Technology:

- What are the positive and negative impacts that animals have on humans (society) and the environment and how can these be minimized or enhanced? (SE1.1)
- What are the positive and negative impact that different kinds of human activity can have on animals and where they live and how can these be minimized or enhanced?(SE1.2)
- What are the basic needs, characteristics, behavior and adaptations of different types of animals? (SE2)

#### Assessment for Learning

Direct Observation – anecdotal

Rating Scale at completion of all centres.

#### Teacher Notes

Students will be given BLM 2.4a) that compares animals to people. Students will check off the needs animals have and the needs that people have and discover what common needs they share.

In their learning logs students will use BLM 2.4b) to guide their work. They will record their observations and brainstorm with a partner positive and negative ways that animals and people impact one another.

Students will also discuss with their whole group what they can do to protect animals and where they live.

Students will write a personal reflection in their learning log. Materials: "Comparing Animals and People" chart, learning logs, BLM2.4a) and 2.4b)

#### Instruction

**Time to Teach** (5 minutes)

- Day one: Send students to center and ask if there are any questions before beginning.

**Time to Practice** (30 minutes)

- Students will complete checklist\chart comparing the needs of animals and plants.
- Students will record their observations in their learning logs as well as list ways with the help of a partner that animals and people impact each other both positively and negatively.
- In their group, students will discuss what they can do to protect animals and where they live. Students will then write a personal reflection in their learning log.

**Time to Share** (5 minutes)

- Ask students if they have any questions.
- Ask students to record what they have learned today in their learning log.

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BLM 2.4a)

Centre: Comparing Animals and Humans

Student Name: \_\_\_\_\_

Complete the chart given. Read the Item to Compare list and place a check mark in the box under ANIMAL if an animal needs or has this characteristic and place a check mark in the box under HUMANS if people need or have this characteristic.

Item to Compare	ANIMALS	HUMANS
Need water to live		
Need to sleep		
Need a place to live		
Need air to survive		
Need food to live		
Grow		
Change		
Die		
Depend on other animals		

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BLM 2.4 b)

Centre: Comparing Animals and Humans

Look at the chart you completed comparing the needs and characteristics of Animals and Humans, BLM 2.4 a)

In your Learning Log, record your answers to the following questions:

1. What did you notice when you compared the list of needs and characteristics for animals and humans?
2. Can you think of other things that are not on the list that both animals and humans need or have in common?
3. With a partner brainstorm and record some ways that animals and humans affect one another positively.
4. With a partner think and record some ways that animals and humans affect one another negatively.
5. In your small centre group, discuss ways that you could protect animals and where they live. Record one idea in your Learning Log.

## **Understanding Life Systems Strand Grade 2**

### **Lesson 2.5 The Creation Story**

#### **Purpose**

Students will read the Creation Story in Genesis and complete an entry in their learning log. This will help students recognize that God created all animals and that the human person is the greatest of all these creatures. Students will look critically at the Creation Story and identify why we should protect animals and where they live.

#### **Essential Understandings**

Catholic Curriculum Map Links:

- How do I work with God's gifts?
- Recognize that the human person is the greatest of God's creatures.
- Demonstrate an understanding of life as a gift and identify the responsibility that results from that gift.

Science and Technology:

- What are the positive and negative impacts that animals have on humans (society) and the environment and how can these be minimized or enhanced? (SE1.1)
- What are the positive and negative impact that different kinds of human activity can have on animals and where they live and how can these be minimized or enhanced?(SE1.2)
- What are the basic needs, characteristics, behavior and adaptations of different types of animals? (SE2)

#### **Assessment for Learning**

Direct Observation – anecdotal and rating scale at completion of all centres.

#### **Teacher Notes**

Materials: 5 primary Bibles, learning logs, center card with reflection questions, center card with points of reflection as listed in "Time to Practice", BLM 2.5.

#### **Instruction**

**Time to Teach** (5 minutes)

- Day one: Send students to center and ask if there are any questions before beginning.

**Time to Practice** (30 minutes)

- Students will read Genesis Chapter One, the "Creation Story".
- Students will follow BLM 2.5 as a guide. They will consider the following and record their responses in their learning logs:
  1. What does God say that tells us that humans are the greatest of His creatures?
  2. What does God want us to do with His creation?
  3. Write about a time when you cared for one of the animals in God's creation.

**Time to Share** (5 minutes)

- Ask students if they have any questions.
- Ask students to share what they have learned today.

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BLM 2.5

Centre: The Creation Story

Student Name: \_\_\_\_\_

Turn to Genesis 1 in the Bible and read the story of how God created the world.

In your Learning Log answer the following questions:

1. What does God say that tells us that we are the greatest of His creatures?
2. What does God want us to do with His creation?
3. Write about a time when you cared for one of the animals in God's creation.

## **Understanding Life Systems Strand Grade 2**

### **Subtask 3: Animal Needs, Behaviors, and Adaptations**

#### **Lesson 3.1 Animals, Needs, Behaviors and Adaptations**

##### **Purpose**

Students will read a note on Animals, Needs, Behaviors and Adaptations and create a Venn diagram highlighting the similarities and differences between humans and other animals.

##### **Essential Understandings**

Catholic Curriculum Map Links:

- How do I work with God's gifts?
- Recognize that the human person is the greatest of God's creatures.
- Demonstrate and understanding of life as a gift and identify the responsibility that results from that gift.

Science and Technology:

- What are the positive and negative impacts that animals have on humans (society) and the environment and how can these be minimized or enhanced? (SE1.1)
- What are the positive and negative impact that different kinds of human activity can have on animals and where they live and how can these be minimized or enhanced?(SE1.2)
- What are the basic needs, characteristics, behavior and adaptations of different types of animals? (SE2)

##### **Assessment for Learning**

##### **Teacher Notes**

This lesson will provide students with information that is necessary for upcoming experiences, projects and the culminating experience. Materials: copy of note written on blackboard or overhead, BLM 3.1, learning logs

##### **Instruction**

**Time to Teach** (10 minutes)

- Read aloud note. (Shared reading) Discuss at various points.
- Answer any questions.
- Tell students to read note again and create a Venn diagram highlighting the similarities and differences between humans and other animal's needs, behaviors and adaptations.

**Time to Practice** (20 minutes)

- Students will discuss note in small groups and create a Venn diagram highlighting the similarities and differences between humans and other animals.

**Time to Share** (10 minutes)

- One reporter from each group will share their findings.

**Understanding Life Systems Strand  
Grade 2**

BLM 3.1

Animal Needs, Behaviors and Adaptations

Student Name: \_\_\_\_\_

Animals and people need food, air and water.

Without water people or animals would die.

Animals and people have different types of homes depending on their needs.

Some animals live in the forest. Some animals live high in trees. Some animals live underneath the soil and some animals live in water.

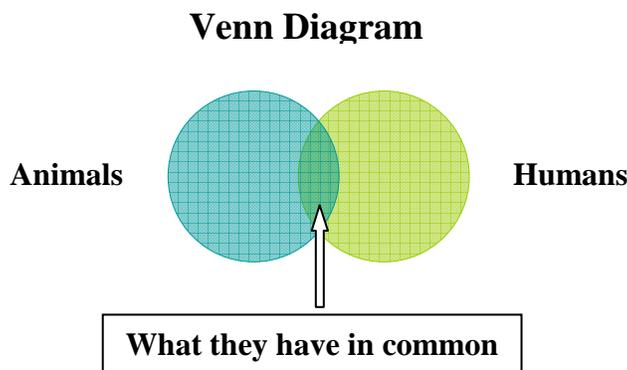
Both animals and people grow and change.

Some babies like fish or snakes are born looking like their parents, but are smaller. These babies can take care of themselves.

Some babies like people and kittens are born looking similar to their parents. These babies grow and change and need their parents to take care of them.

Some babies like caterpillars don't look like their parents at all when they are born. They go through changes called metamorphosis.

With your group make a Venn diagram on chart paper to record the similarities and differences for animals and humans. Your Venn diagram will look like this:



## **Understanding Life Systems Strand Grade 2**

### **Lesson 3.2 Nature Walk**

#### **Purpose**

Students will go on a nature walk looking for animals. Students will observe their homes, needs and behaviors.

#### **Essential Understandings**

Catholic Curriculum Map Links:

- How do I work with God's gifts?
- Recognize that the human person is the greatest of God's creatures.
- Demonstrate and understanding of life as a gift and identify the responsibility that results from that gift.

Science and Technology:

- What are the positive and negative impacts that animals have on humans (society) and the environment and how can these be minimized or enhanced? (SE1.1)
- What are the positive and negative impact that different kinds of human activity can have on animals and where they live and how can these be minimized or enhanced?(SE1.2)
- What are the basic needs, characteristics, behavior, adaptations of different types of animals? (SE2)

#### **Assessment for Learning**

Observation – anecdotal, Rating Scale used to assess upon completion of centres.

#### **Teacher Notes**

This experience will provide the students with an opportunity to explore nature for animals and their habitats. It is hoped that children may find a caterpillar, tadpole or some form of life that they could bring back to class with them. A habitat will be created for this animal after a whole group discussion surrounding the needs of this animal.

The animal in its habitat will then be observed over a period of time. Students will draw and label diagrams and record their observations from time to time in their learning logs.

This experience will help them understand the basic needs of animals and how they grow, and change and adapt as well as nurture a sense of responsibility. Give the students time to observe this habitat regularly.

You may want to arrange for a double science period in order to allow for time to create a habitat for students' animals or one for the class. Materials: letter/appropriate forms required for parent permission for nature walks clip boards, pencils, learning logs, bug catchers, container with air holes

#### **Instructions**

##### **Time to Teach** (5 minutes)

Review rules for appropriate behavior for a nature walk.

Tell students to record any observations they make regarding animal characteristics, habitats, and behavior. Tell students they may catch a caterpillar or tadpole for observation.

##### **Time to Practice** (25 minutes)

Students will record any observations made regarding animal characteristics, habitats, behavior on their clip board. Students may catch an animal in an appropriate container with air holes.

##### **Time to Share** (10 minutes)

Students share observations.

## Understanding Life Systems Strand Grade 2

### Lesson 3.3 Building Habitats

#### Purpose

Students will go on a nature walk looking for animals. Students will observe their homes needs and behaviors and build an appropriate habitat specific to the needs of their animal.

#### Essential Understandings

Catholic Curriculum Map Links:

- How do I work with God's gifts?
- Recognize that the human person is the greatest of God's creatures.
- Demonstrate and understanding of life as a gift and identify the responsibility that results from that gift.

#### Science and Technology

- What are the positive and negative impacts that animals have on humans (society) and the environment and how can these be minimized or enhanced? (SE1.1)
- What are the positive and negative impact that different kinds of human activity can have on animals and where they live and how can these be minimized or enhanced?(SE1.2)
- What are the basic needs, characteristics, behavior and adaptations of different types of animals? (SE2)

#### Assessment for Learning

Observation – anecdotal, Rating Scale used to assess upon completion of centres.

#### Teacher Notes

In lesson 3.2 students were provided with an opportunity to explore nature, animals and their habitats. During this experience, students will have an opportunity to create a habitat for an animal they caught on their nature walk. As a whole group, the class will list the basic needs of all living things – air, water, food, space and warmth and then consider what will make their specific animal feel at home. This animal in its habitat will then be observed over a period of time. Students will draw and label diagrams and record their observations from time to time in their learning logs. Today they will complete their first observation. This experience will help them understand the basic needs of animals and how they grow, change and adapt. Give the students time to observe this habitat regularly. Students should also be informed that at the end of the unit and class observations the animals will be returned to their natural habitat so they go back to their homes.

Materials: clip boards, pencils, learning logs, bug catchers, container with air holes.

#### Instructions

**Time to Teach** (10 minutes)

- Generate whole group discussion by posing the question: What are the basic needs of all living things? List these needs on the blackboard.
- Have students form groups based on the animals that were caught on the nature walk.
- Observe students while they create habitats and draw and label diagram of the animal in its habitat.

**Understanding Life Systems Strand  
Grade 2**

**Time to Practice** (25 minutes)

- Students will discuss and list the basic needs of living things.(whole group)
- Students will take this list and create a habitat for one of the animals they caught on their nature walk.(small group)
- Students will draw and label a diagram of the animal in its habitat in their learning log.

**Time to Share** (5 minutes)

- Students will share any questions that have arose and share what they have learned from this experience as well as record in their learning logs personal reflections.

## **Understanding Life Systems Strand Grade 2**

### **Lesson 3.4 People Grow and Change**

#### **Purpose:**

Students will investigate growth and change in people by matching current pictures of their peers with pictures of them as babies.

#### **Essential Understandings**

Catholic Curriculum Map Links:

- How do I work with God's gifts?
- Recognize that the human person is the greatest of God's creatures.
- Demonstrate and understanding of life as a gift and identify the responsibility that results from that gift.

Science and Technology:

- What are the positive and negative impacts that animals have on humans (society) and the environment and how can these be minimized or enhanced? (SE1.1)
- What are the positive and negative impact that different kinds of human activity can have on animals and where they live and how can these be minimized or enhanced?(SE1.2)
- What are the basic needs, characteristics, behavior and adaptations of different types of animals? (SE2)

#### **Assessment for Learning**

Observation – anecdotal, Rating Scale used to assess upon completion of centres.

#### **Teacher Notes**

Ahead of time, ask each student to bring in a current picture of themselves and one as a baby. In groups, students will match current pictures of their peers to their baby picture. As students consider how each student has changed since they were a baby it will be easy to comprehend that people grow and change. Later on during this subtask, students will recognize that other animals grow and change too, thus highlighting again the similarities and differences between people and other animals. Students will make the connection that just as it was their parents' responsibility to help them through the various stages of growth that people, as the greatest of God's creatures, have a responsibility to care and protect animals as they change and grow. Materials: a baby and current picture of each student, learning logs

#### **Instructions**

**Time to Teach** (10 minutes)

- Ask the children to sit in small groups and mix up current pictures of themselves as well as their picture as a baby with their peers.
- Ask the children to try to match some of the pictures and pose the question;
- "How has \_\_\_\_\_grown and changed since they were a baby?"
- Tell each group to compile a list of these changes in their learning log.
- Have a reporter from each group share their group findings while the teacher records these on chart paper.

**Understanding Life Systems Strand  
Grade 2**

**Time to Practice** (20 minutes)

- Students match current pictures of their peers with their baby picture.
- Students answer the question for each match: “How has \_\_\_\_\_ grown and changed since they were a baby?” These changes will be listed in each student’s learning log.
- One reporter from each group will share their groups list while the teacher records these findings on chart paper.
- All students will participate in teacher led discussion.

**Time to Share** (10 minutes)

- Discuss in large group who took care of them as they grew and changed. Ask children to consider that as God’s greatest creature if we have a responsibility to care and protect other animals and how we might do so.
- Students will share any questions that have arose and share what they have learned from this experience.

## **Understanding Life Systems Strand**

### **Grade 2**

#### **Lesson 3.5 Animals Grow and Change - Life Cycles**

##### **Purpose**

Students will investigate growth and change in a variety of animals.

##### **Essential Understandings**

Catholic Curriculum Map Links:

- How do I work with God's gifts?
- Recognize that the human person is the greatest of God's creatures.
- Demonstrate and understanding of life as a gift and identify the responsibility that results from that gift.

Science and Technology:

- What are the positive and negative impacts that animals have on humans (society) and the environment and how can these be minimized or enhanced? (SE1.1)
- What are the positive and negative impact that different kinds of human activity can have on animals and where they live and how can these be minimized or enhanced?(SE1.2)
- What are the basic needs, characteristics, behavior and adaptations of different types of animals? (SE2)

##### **Assessment for Learning**

Observation – anecdotal

##### **Teacher Notes**

Students will be given a short note about life cycles. Students will learn that all living things including animals and people have a life cycle. Students will spend some time directly observing the animals and the habitats they created from their nature walk. Students will record observations and questions about purpose and change of any characteristics. Students will also draw a diagram of the changes in their learning logs. Materials: BLM 3.5

##### **Instruction**

**Time to Teach** (5 minutes)

Review lesson from previous day on how people grow and change. Give students BLM 3.5 Life Cycles.

**Time to Practice** (25 minutes)

Students will read and discuss the note on Life Cycles. They will record one of the Life Cycle and illustrate it in their learning logs.

Students will observe the animals in the habitats they created and record any observations or questions they may have regarding any change in characteristics and their purpose.

Students will draw and label a diagram to reflect their observations.

**Time to Share** (10 minutes)

Students will share one thing they learned through direct observation.

## **Understanding Life Systems Strand**

### **Grade 2**

#### **BLM 3.5**

#### **Life Cycles**

**Student Name:** \_\_\_\_\_

All living things have a life cycle, a way of continuing life. This means that all living things including animals and people are born (either alive from their mother or hatched from an egg), grow and change and eventually die. We believe that we should show respect for all stages of growth and development. We believe in showing respect for life!

#### **Human Life Cycle**

Baby ----- Child ----- Teenager ----- Adult

#### **Frogs Life Cycle**

Egg ----- Tadpole ----- Frog

#### **Life Cycle of A Butterfly**

Egg ----- Larva (Caterpillar) ----- Pupa (Cocoon) ----- Butterfly

#### **Life Cycle of a Bird**

Egg ----- Chick ----- Bird

## **Understanding Life Systems Strand Grade 2**

### **Subtask 4: The Importance of Animals**

#### **Description**

In this subtask students will consider the importance of animals to humans and the environment as well as the human impact on animals and where they live. God created animals and humans to work together to support and sustain the balance of nature and therefore it is our responsibility to protect animals and where they live. (Bio-diversity)

#### **Lesson 4.1 Why are Animals Important to Humans?**

##### **Purpose**

In this subtask students will consider the importance of animals to humans and the environment. God created animals and humans to work together to support and sustain the balance of nature and therefore it is our responsibility to protect animals and where they live. (Bio-diversity)

#### **Essential Understandings**

Catholic Curriculum Map Links:

- How do I work with God's gifts?
- Recognize that the human person is the greatest of God's creatures.
- Demonstrate and understanding of life as a gift and identify the responsibility that results from that gift.

Science and Technology:

- What are the positive and negative impacts that animals have on humans (society) and the environment and how can these be minimized or enhanced? (SE1.1)
- What are the positive and negative impact that different kinds of human activity can have on animals and where they live and how can these be minimized or enhanced?(SE1.2)
- What are the basic needs, characteristics, behavior and adaptations of different types of animals? (SE2)

#### **Assessment for Learning**

Direct Observation –anecdotal, Rating Scale will be used to assess learning log upon completion of centers.

#### **Teacher Notes**

In this lesson students will be given an opportunity to consider the positive influence animals have on humans. This experience will provide an appreciation for animals and highlight in later lessons the seriousness of the effect human behavior has on animals. Materials: blackboard\chart paper and learning logs

#### **Instructions**

**Time to Teach** (10 minutes)

- Tell students to discuss in their small group why animals are important to humans and the positive impact they have on our life. Students will record a list in their learning logs.

**Understanding Life Systems Strand  
Grade 2**

**Time to Practice** (20 minutes)

- Students brainstorm in their small group, why animals are important and the positive affect animals have on their lives.
- Students will record the list in their learning logs.
- One student will report groups findings, while teacher prints ideas on board for students to copy into learning logs.

Possible ideas shared by students and teacher:

- animals provide food, medicine, clothing, shelter
- provide comfort, protection, guidance, (“seeing eye dog”)
- filter harmful substances out of water

**Time to Share** (10 minutes)

Students will write a brief reflection in their learning logs considering the unit guiding question: Why are all animals in God’s creation important? To extend the reflection also pose the question: What would human life be like if there were no animals on earth?

## Understanding Life Systems Strand Grade 2

### Lesson 4.2 Some Animals Are Endangered

#### Purpose

To help students recognize the positive and negative impact that different kinds of human activity can have on animals. To introduce students to what it means for an animal to be “endangered.” To identify how as humans we can respond to God’s call to protect animals and their environment by changing our own behavior.

#### Essential Understandings

Catholic Curriculum Map Links:

- How do I work with God’s gifts?
- Recognize that the human person is the greatest of God’s creatures.
- Demonstrate and understanding of life as a gift and identify the responsibility that results from that gift.

Science and Technology:

- What are the positive and negative impacts that animals have on humans (society) and the environment and how can these be minimized or enhanced? (SE1.1)
- What are the positive and negative impact that different kinds of human activity can have on animals and where they live and how can these be minimized or enhanced?(SE1.2)
- What are the basic needs, characteristics, behavior and adaptations of different types of animals? (SE2)

#### Assessment for Learning

Direct Observation –anecdotal, Rating Scale will be used to assess learning log upon completion of centers.

#### Teacher Notes

In this lesson, students will be introduced to the word and concept “endangered”.

Find a picture book that deals with animal’s homes being somehow disrupted by people.

(i.e. Don’t Cut the Lawn by Margaret Mahey) This story can be accessed on the internet.

Materials: picture book and learning logs

#### Instructions

**Time to Teach** (5 minutes)

- Print the word “endangered” on the board and brainstorm what this word means.
- Identify the root word – “danger” and have students consider further.
- Read a picture book that deals with animal’s homes being disrupted by people.
- Ask students again what they think the word “endangered” means.
- Print definition of “endangered” on the board. (Endangered species: A species that is in danger of extinction in the foreseeable future S& T Glossary p. 156)
- Pose the following questions for student to consider:
  - List the animals that were endangered in this story? Teacher prints list on board.
  - Why were they endangered?
  - What does God expect us to do about this? Why should we respect creation?

## **Understanding Life Systems Strand**

### **Grade 2**

#### **Time to Practice** (25 minutes)

- Students will copy the definition of “endangered” in their learning logs (Endangered species: A species that is in danger of extinction in the foreseeable future S& T Glossary p. 156)
- Students will list as a whole group the animals that were endangered in the story as teacher prints list on board.
- As a whole group discuss why these animals were endangered. What could the character in the story do differently so that the animals’ habitats would not be disrupted?

#### **Time to Share** (10 minutes)

- Students will share behaviors that they or their family practice at home that could be detrimental to the habitats of animals and share ways that this behavior could be changed or adapted to protect all God’s creatures in a way that shows respect for all life.

## **Understanding Life Systems Strand**

### **Grade 2**

#### **Lesson 4.3 Some Animals Become Extinct**

##### **Purpose**

To help students recognize the positive and negative impact that different kinds of human activity can have on animals. To introduce students to what it means for an animal to be extinct.

To identify how as humans we can respond to God's call to protect animals and their environment by changing our own behavior.

##### **Essential Understandings**

Catholic Curriculum Map Links:

- How do I work with God's gifts?
- Recognize that the human person is the greatest of God's creatures.
- Demonstrate and understanding of life as a gift and identify the responsibility that results from that gift.

Science and Technology:

- What are the positive and negative impacts that animals have on humans (society) and the environment and how can these be minimized or enhanced? (SE1.1)
- What are the positive and negative impact that different kinds of human activity can have on animals and where they live and how can these be minimized or enhanced?(SE1.2)
- What are the basic needs, characteristics, behavior and adaptations of different types of animals? (SE2)

##### **Assessment for Learning**

Direct Observation- anecdotal, Rating Scale to be used to assess learning logs upon completion of centers.

##### **Teacher Notes**

In this lesson, students will be introduced to the word and concept "extinct". Find a picture book that tells a story about an animal becoming extinct. For example, in the story, The Fisherman and His Wife from Grimm's Fairy Tales the fisherman continually returns to the sea to ask the fish for one more wish. The story parallels how the way we live as humans affects negatively the habitats of the animals around us. Each time the fish grants his wish, its habitat continues to disintegrate until finally the fish can give no more and dies. This story can be accessed on the internet and read to students. Students can close their eyes and visualize as the teacher reads.

Throughout this lesson highlight that sometimes human activity may threaten the existence of some animals. As the human population grows it affects the habit or natural home of animals. Habitats, which have existed for many years, provide food, water, shelter and space for the animals. It may become threatened if we do not take care and plan carefully as development may alter the habitat (i.e. take space away) or alter it (i.e. pollution). Besides human activity other things may also affect a species of animals such as climate changes or the introduction of another species into the habitat. Only animals that can find a way to adapt to their changing world will be able to survive. Materials: Picture Book Story Learning logs

## **Understanding Life Systems Strand Grade 2**

### **Instructions**

#### **Time to Teach** (10 minutes)

- Print the word extinction on the board and brainstorm what this word means.
- Read a picture book that deals with animal's homes lost.
- Ask students again what they think the word extinct means.
- Print definition of extinction on the board (Extinction means the complete and permanent disappearance of a species from the earth S&T Glossary p. 157). Discuss some animals in the Canada that are being monitored under the Committee on the Status of Endangered Wildlife in Canada. Discuss some of the levels: Special Concern (i.e. Polar Bear), Threatened (i.e. Arctic Beluga Whale), Endangered (i.e. Eastern Barn Owl), Extinct (i.e. Blue Walleye)
- Pose questions for students to consider and record in their learning log

#### **Time to Practice** (20 minutes)

- Students brainstorm what they think the word extinct means.
- Students will listen to the story read by teacher.
- Students will copy the definition of "extinct" in their learning logs.
- As a whole group discuss why the animal in the story became extinct and why. What could the character in the story have done differently so that the animal would not have died?
- Students will discuss animals that are at risk in Canada or the world and how we can help protect them (i.e. laws about hunting season, rebuilding their natural habitats, education, etc.)
- Students will answer the following questions in their learning logs:  
What happens when people do not care for the habitats of animals?  
What does God want us to do, to show respect for all God's creatures?

#### **Time to Share** (10 minutes)

- Students will share behaviors that they or their family practice at home that show they care for animals
- Students will discuss what God calls us to do as caretakers of His creation and brainstorm ways that our behavior could be changed or adapted responsibly.
- Students will share any questions that have arisen and share what they have learned from this experience.

## **Understanding Life Systems Strand Grade 2**

### **Lesson 4.4 My Interesting Animal**

#### **Purpose**

To use research skills and acquired knowledge from previous investigations to investigate the basic needs, characteristics, behavior and adaptations of an animal of their choice.

#### **Essential Understandings**

Catholic Curriculum Map Links:

- How do I work with God's gifts?
- Recognize that the human person is the greatest of God's creatures.
- Demonstrate and understanding of life as a gift and identify the responsibility that results from that gift.

Science and Technology:

- What are the positive and negative impacts that animals have on humans (society) and the environment and how can these be minimized or enhanced? (SE1.1)
- What are the positive and negative impact that different kinds of human activity can have on animals and where they live and how can these be minimized or enhanced?(SE1.2)
- What are the basic needs, characteristics, behavior and adaptations of different types of animals? (SE2)

#### **Assessment for Learning**

Rating Scale

#### **Teacher Notes**

Students will complete a short report on an animal of their choice. They will use research skills and acquired knowledge from previous investigations to research the basic needs, characteristics, behavior and adaptations of an animal of their choice. Students will be given a simple hand-out that will be used to guide and record their research. You may want to book some library and computer time for students to do research as well as allow a few 40 minute science periods to begin and complete assignment in class.

Materials: report hand-out, classroom library of books about animals, access to library and computers, BLM 4.3, Rubric

#### **Instructions**

**Time to Teach** (10 minutes)

- Give students report to fill in. Tell them they will complete a short research assignment on an animal of their choice highlighting their basic needs, characteristics behavior and adaptations, to be completed in class.
- Tell students that they will be given computer and library time to assist them.
- Read through report guide with students and answer any questions they may have. Discuss and model appropriate research techniques.

**Time to Practice** (25 minutes)

- Students will choose an animal of their choice and begin researching, making use of library time, additional access to computers and classroom library of non-fiction books.

**Time to Share** (5 minutes)

- Respond to any questions or comments students may have and report any progress they have made.

**Understanding Life Systems Strand**  
**Grade 2**

BLM 4.4

My Interesting Animal

Student Name: \_\_\_\_\_

My interesting animal is a \_\_\_\_\_.

I know God created this animal.

It likes to eat \_\_\_\_\_

It likes to drink \_\_\_\_\_

It lives in \_\_\_\_\_

The climate it lives in is \_\_\_\_\_

It likes to \_\_\_\_\_

It looks like \_\_\_\_\_

When it was a baby it \_\_\_\_\_

I think God created it because \_\_\_\_\_

This animal is helpful to humans and other animals because:

\_\_\_\_\_

People can protect this animal and where it lives by:

\_\_\_\_\_

We should protect this animal because:

\_\_\_\_\_

## **Understanding Life Systems Strand Grade 2**

### **Subtask 5: Culminating Performance Task**

#### **Description**

In this subtask students will use their new acquired knowledge and research skills to create and present a television or radio commercial that explains why animals are important and how people can protect them and the places where they live.

#### **Lesson 5.1 Introduction to Culminating Performance Task**

#### **Purpose**

Students will work in small groups to use their newly acquired knowledge and research skills to create and present a television or radio commercial that explains why animals are important and how people can protect them and the places where they live.

#### **Essential Understandings**

Catholic Curriculum Map Links:

- How do I work with God's gifts?
- Recognize that the human person is the greatest of God's creatures.
- Demonstrate and understanding of life as a gift and identify the responsibility that results from that gift.

Science and Technology:

- What are the positive and negative impacts that animals have on humans (society) and the environment and how can these be minimized or enhanced? (SE1.1)
- What are the positive and negative impact that different kinds of human activity can have on animals and where they live and how can these be minimized or enhanced?(SE1.2)
- What are the basic needs, characteristics, behavior and adaptations of different types of animals? (SE2)

#### **Assessment for Learning**

Rubric

#### **Teacher Notes**

Students will create a television or radio commercial that tells why animals are important and how humans must protect them and the places where they live. You may want to book some library and computer time for students to do research as well as allow a few 40 minute science periods to begin and complete assignment in class. These periods will be used to draft, edit and practice presentation. Some students may want to record or video tape their presentation. Students could work individually or in pairs. Create a radio\TV commercial to be used as a model for students. Materials: classroom library of books about animals, access to library and computers, bristol board, markers, tape recorder, video recorder

**Understanding Life Systems Strand**  
**Grade 2**

**Instructions**

**Time to Teach** (25 minutes)

- Tell students that they will work in small groups to create a television or radio commercial that tells why animals are important and how humans must protect them and the places where they live. Tell students that they will be given computer and library time to assist them.
- Brainstorm with students a list of what makes a good radio commercial and what makes a good television commercial.
- Using rubrics as a guide. Review with students the expectations using “kid language”.

**Time to Practice** (10 minutes plus additional periods given for group work)

- Students begin brainstorming\drafting ideas alone or with a partner and begin practicing presentation when they are ready.

**Time to Share** (5 minutes at the end of each work session)

- Respond to any questions or comments students may have.
- Share what went well with their work session and goals for next day

## **Understanding Life Systems Strand Grade 2**

### **Lesson 5.2 Culminating Task Presentations**

#### **Purpose**

To present a television or radio commercial that explains why animals are important and how people can protect them and the places where they live.

#### **Essential Understandings**

Catholic Curriculum Map Links:

- How do I work with God's gifts?
- Recognize that the human person is the greatest of God's creatures.
- Demonstrate an understanding of life as a gift and identify the responsibility that results from that gift.

Science and Technology:

- What are the positive and negative impacts that animals have on humans (society) and the environment and how can these be minimized or enhanced? (SE1.1)
- What are the positive and negative impact that different kinds of human activity can have on animals and where they live and how can these be minimized or enhanced?(SE1.2)
- What are the basic needs, characteristics, behavior and adaptations of different types of animals? (SE2)

#### **Assessment for Learning**

Rubric

#### **Teacher Notes**

Students will present their television or radio announcements. Hand-out a peer response sheet for all students to complete for each presentation. Prepare a self-evaluation for each student to complete for themselves. You will need a rubric prepared for each student. Materials: peer response sheet, self-evaluation, rubric for teacher, television, stereo

#### **Instructions**

**Time to Teach** (10 minutes)

- Introduce the presentations.
- Explain to students that they will complete a peer response sheet for each presentation (i.e. One thing I really liked in the presentation, One new thing I learned, One question I have)
- Share the self-evaluation with students explaining its purpose.

**Time to Practice** (25 minutes or more depending on class size and number of groups)

- Each student presents while peers listen and give feedback

**Time to Share** (5 minutes)

- Respond to any questions or comments students may have

**Understanding Life Systems Strand  
Grade 2**

Student Name: _____				
Categories	Level 1	Level 2	Level 3	Level 4
<b>Knowledge and Understanding - Subject-specific content acquired in each grade (knowledge), and the comprehension of its meaning and significance (understanding)</b>				
Knowledge of similarities and differences among different kinds of animals as well as the distinctiveness of individual animals.	The student: <ul style="list-style-type: none"> <li>demonstrates limited knowledge of the similarities and differences among different kinds of animals as well as the distinctiveness of individual animals</li> </ul>	The student: <ul style="list-style-type: none"> <li>demonstrates some knowledge of the similarities and differences among different kinds of animals as well as the distinctiveness of individual animals</li> </ul>	The student: <ul style="list-style-type: none"> <li>demonstrates considerable knowledge of the similarities and differences among different kinds of animals as well as the distinctiveness of individual animals</li> </ul>	The student: <ul style="list-style-type: none"> <li>demonstrates a thorough knowledge of the similarities and differences among different kinds of animals as well as the distinctiveness of individual animals</li> </ul>
Understanding of the positive and negative ways humans and animals impact one another as well as how they grow and change.	The student: <ul style="list-style-type: none"> <li>demonstrates a limited understanding of the positive and negative ways humans and animals impact one another as well as how they grow and change.</li> </ul>	The student: <ul style="list-style-type: none"> <li>demonstrates some understanding of the positive and negative ways humans and animals impact one another as well as how they grow and change</li> </ul>	The student: <ul style="list-style-type: none"> <li>demonstrates considerable understanding of the positive and negative ways humans and animals impact one another as well as how they grow and change</li> </ul>	The student: <ul style="list-style-type: none"> <li>demonstrates a thorough understanding of the positive and negative ways humans and animals impact one another as well as how they grow and change</li> </ul>
<b>Thinking and Investigation - The use of critical thinking skills and inquiry and problem-solving skills and/or processes</b>				
Uses research and inquiry skills to create and present a television or radio commercial	The student: <ul style="list-style-type: none"> <li>uses research and inquiry skills to create and present a television or radio commercial with limited effectiveness</li> </ul>	The student: <ul style="list-style-type: none"> <li>uses research and inquiry skills to create and present a television or radio commercial with some effectiveness</li> </ul>	The student: <ul style="list-style-type: none"> <li>uses research and inquiry skills to create and present a television or radio commercial with considerable effectiveness</li> </ul>	The student: <ul style="list-style-type: none"> <li>uses research and inquiry skills to create and present a television or radio commercial with a high degree of effectiveness</li> </ul>
Use of processing skills to identify the positive and negative impact animals and humans have on one another.	The student: <ul style="list-style-type: none"> <li>use of processing skills to identify the positive and negative impact animals and humans have on one another with limited effectiveness.</li> </ul>	The student: <ul style="list-style-type: none"> <li>use of processing skills to identify the positive and negative impact animals and humans have on one another with some effectiveness</li> </ul>	The student: <ul style="list-style-type: none"> <li>use of processing skills to identify the positive and negative impact animals and humans have on one another with considerable effectiveness</li> </ul>	The student: <ul style="list-style-type: none"> <li>use of processing skills to identify the positive and negative impact animals and humans have on one another with a high degree of effectiveness</li> </ul>

Integrating Science and Technology and Catholic Curriculum Maps

**Understanding Life Systems Strand**  
**Grade 2**

Use of critical/creative thinking to make connections between the need to protect animals and the places where they live with the responsibilities given to us by God to be caretakers of His creation.	The student: <ul style="list-style-type: none"> <li>uses critical/creative thinking to make connections between the need to protect animals and the places where they live with the responsibilities given to us by God to be caretakers of His creation with limited effectiveness.</li> </ul>	The student: <ul style="list-style-type: none"> <li>uses critical/creative thinking to make connections between the need to protect animals and the places where they live with the responsibilities given to us by God to be caretakers of His creation with some effectiveness.</li> </ul>	The student: <ul style="list-style-type: none"> <li>uses critical/creative thinking to make connections between the need to protect animals and the places where they live with the responsibilities given to us by God to be caretakers of His creation with considerable effectiveness</li> </ul>	The student: <ul style="list-style-type: none"> <li>uses critical/creative thinking to make connections between the need to protect animals and the places where they live with the responsibilities given to us by God to be caretakers of His creation with a high degree of effectiveness</li> </ul>
<b>Communication - The conveying of meaning through various forms</b>				
Expression and organization of ideas and information in the presentation of a television or radio commercial	The student uses: <ul style="list-style-type: none"> <li>expression and organization of ideas and information in the presentation of a television or radio commercial with limited effectiveness</li> </ul>	The student uses: <ul style="list-style-type: none"> <li>expression an organization of ideas and information in the presentation of a television or radio commercial with some effectiveness</li> </ul>	The student uses: <ul style="list-style-type: none"> <li>expression and organization of ideas and information in the presentation of a television or radio commercial with considerable effectiveness</li> </ul>	The student uses: <ul style="list-style-type: none"> <li>expression and organization of ideas and information in the presentation of a television or radio commercial with a high degree of effectiveness.</li> </ul>
Communicates in the form of a television or radio commercial	The student: <ul style="list-style-type: none"> <li>communicates his/her knowledge of the issue in a television or radio commercial with limited effectiveness.</li> </ul>	The student: <ul style="list-style-type: none"> <li>communicates his/her knowledge of the issue in a television or radio commercial with some effectiveness</li> </ul>	The student: <ul style="list-style-type: none"> <li>communicates his/her knowledge of the issue in a television or radio commercial with considerable effectiveness</li> </ul>	The student: <ul style="list-style-type: none"> <li>communicates his/her knowledge of the issue in a television or radio commercial with a high degree of effectiveness</li> </ul>
Use of spelling, grammar and terminology from the unit	The student uses: <ul style="list-style-type: none"> <li>spelling, grammar and terminology from the unit with limited effectiveness.</li> </ul>	The student uses: <ul style="list-style-type: none"> <li>spelling, grammar and terminology from the unit with some effectiveness.</li> </ul>	The student uses: <ul style="list-style-type: none"> <li>spelling, grammar and terminology from the unit with considerable effectiveness.</li> </ul>	The student uses: <ul style="list-style-type: none"> <li>spelling, grammar and terminology form the unit with a high degree of effectiveness.</li> </ul>
<b>Application - The use of knowledge and skills to make connections within and between various contexts</b>				
Application of knowledge of the impact humans have on the habitats of animals, and living in accordance with God's will.	The student: <ul style="list-style-type: none"> <li>applies knowledge of the impact humans have on the habitat of animals, and living in accordance with God's will with limited effectiveness.</li> </ul>	The student: <ul style="list-style-type: none"> <li>applies knowledge of the impact humans have on the habit of animals, and living in accordance with God's will with some effectiveness.</li> </ul>	The student: <ul style="list-style-type: none"> <li>applies knowledge of the impact humans have on the habit of animals, and living in accordance with God's will with considerable effectiveness.</li> </ul>	The student: <ul style="list-style-type: none"> <li>applies knowledge of the impact humans have on the habit of animals, and living in accordance with God's will with some effectiveness.</li> </ul>

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Grade 2**

<p>Transference of knowledge of how humans impact upon animals and the places where they live and our responsibility as caretakers of God's creation</p>	<p>The student:</p> <ul style="list-style-type: none"> <li>transfers knowledge of how humans impact upon animals and the places where they live and our responsibility as caretakers of God's creation with limited effectiveness.</li> </ul>	<p>The student:</p> <ul style="list-style-type: none"> <li>transfers knowledge of how humans impact upon animals and the places where they live and our responsibility as caretakers of God's creation with some effectiveness.</li> </ul>	<p>The student:</p> <ul style="list-style-type: none"> <li>transfers knowledge of how humans impact upon animals and the places where they live and our responsibility as caretakers of God's creation with considerable effectiveness.</li> </ul>	<p>The student:</p> <ul style="list-style-type: none"> <li>transfers knowledge of how humans impact upon animals and the places where they live and our responsibility as caretakers of God's creation with a high degree of effectiveness.</li> </ul>
<p>Making connections between science, society, and the environment through the understanding that God created animals and humans to work together to support and sustain the balance of nature.</p>	<p>The student:</p> <ul style="list-style-type: none"> <li>is able to make connections between science, , society, and the environment through the understanding that God created animals and humans to work together to support and sustain the balance of nature with limited effectiveness.</li> </ul>	<p>The student:</p> <ul style="list-style-type: none"> <li>is able to make connections between science, , society, and the environment through the understanding that God created animals and humans to work together to support and sustain the balance of nature with some effectiveness</li> </ul>	<p>The student:</p> <ul style="list-style-type: none"> <li>is able to make connections between science, , society, and the environment through the understanding that God created animals and humans to work together to support and sustain the balance of nature with considerable effectiveness</li> </ul>	<p>The student:</p> <ul style="list-style-type: none"> <li>is able to make connections between science, , society, and the environment through the understanding that God created animals and humans to work together to support and sustain the balance of nature with a high degree of effectiveness</li> </ul>
<p>Proposing courses of action to ensure that as caretakers of God's creation we protect all animals and where they live</p>	<p>The student is able to:</p> <ul style="list-style-type: none"> <li>propose courses of action to ensure that as caretakers of God's creation we protect all animals and where they live with limited effectiveness.</li> </ul>	<p>The student is able to:</p> <ul style="list-style-type: none"> <li>propose courses of action to ensure that as caretakers of God's creation we protect all animals and where they live with some effectiveness.</li> </ul>	<p>The student is able to:</p> <ul style="list-style-type: none"> <li>propose courses of action to ensure that as caretakers of God's creation we protect all animals and where they live with considerable effectiveness.</li> </ul>	<p>The student is able to:</p> <ul style="list-style-type: none"> <li>propose courses of action to ensure that as caretakers of God's creation we protect all animals and where they live with a high degree of effectiveness.</li> </ul>