

Animal Life Cycles - Unit Plan

Instructor: Vanessa Pereira

Subject: Grade 3 - Science

Unit Title: Animal Life Cycles

Overview

Students will have a chance to learn deeply about the growth and development of different animals. Also, they will discover, connect and compare animal life cycle with the human being development since the earliest stages. By learning the different life cycles students will have a clear idea of the different animal needs including their social, environmental, food and parental needs. Not only during the earliest stages of their life, but during youth and after on their adults stages. Equally important, the students will closely study the local animals' life cycle from a wet land near by the school and the most well-known Canadian animals, bringing their attention to life in their own community.

In addition, when in contact with the animals' life needs students will understand how the environment, its changes caused by the modern life is affecting the life or death of entire species.

To finish, students will be invited to think about the possible environmental problems and solutions to help stop animal extinction. They invite the learning community to think together and take prevention actions as well.

Alberta Plan of Studies - Topic E: Animal Life Cycles:

Source: Alberta Education – Elementary Science Plan of Studies:

<http://education.alberta.ca/media/654825/elemsci.pdf>

Page: B.15 to B.16

Students learn about the growth and development of animals and discover that different animals have different life cycles. By observing the life cycle of one small animal from its earliest stage to adulthood, students acquire a reference point for the study of other animals and come to appreciate the beauty and fragility of life. Students learn that the egg, larva, pupa and adult stages that are characteristic of many insects represent a different life story from that of the egg, young, adult life cycle that is common to most vertebrate animals.

In studying these animals, students learn about the changes in needs of the young as they grow and develop and about the changing relationship between these animals and their environment.

General Learner Expectations - Students will:

- Describe the appearances and life cycles of some common animals, and identify their adaptations to different environments.

- Identify requirements for animal care.

Specific Learner Expectations - Students will:

1. Classify a variety of animals, based on observable characteristics; e.g., limbs, teeth, body covering, overall shape, backbone.
2. Observe and describe the growth and development of at least one living animal, as the animal develops from early to more advanced stages. The animal(s) should be from one or more of the following groups: mammals, birds, fish, reptiles, amphibians or insects. Suggested examples include: gerbils, guppies, mealworms, tadpoles, worms, butterflies/moths. Additional examples from other animal groups might also be included: brine shrimp, isopods, spiders.
3. Predict the next stages in the growth and development of at least one animal from each of the following groups: mammals, birds, fish, reptiles, amphibians and insects identifying similarities and differences in their developmental sequences.
4. Identify the food needs of at least one animal from each of the following groups: mammals, birds, fish, reptiles, amphibians, insects; and describe changes in how each animal obtains food through different stages of its life.
5. Demonstrate awareness that parental care is characteristic of some animals and not of others, and identify examples of different forms of parental care.
6. Demonstrate awareness that animals require different habitats in order to meet their basic needs of food, water, shelter and space.
7. Recognize adaptations of a young animal to its environment, and identify changes in its relationship to its environment as it goes through life; e.g., tadpoles are adapted for life in an aquatic environment; adult frogs show adaptations to both terrestrial and aquatic environments.
8. Identify examples of environmental conditions that may threaten animal survival, and identify examples of extinct animals. 9. Recognize that habitat preservation can help maintain animal populations, and identify ways that student actions can assist habitat preservation.
9. Demonstrate knowledge of the needs of animals studied, and demonstrate skills for their care.

Source: Alberta Education – Elementary Science Plan of Studies:

<http://education.alberta.ca/media/654825/elemsci.pdf>

Page: B.15 to B.16

Class Profile:

The majority of students come from middle class with good family support regarding material, research and community involvement. Also, most of the students are regular learners with great eagerness to learn and experience new activities. The class has two IPP students. Those students will have their needs accommodated during classes. Also, time to time a special educational assistant is available to help students that somehow are having difficulty. The teacher is available all the time to assist students.

Weekly Course Schedule:

Date	Class Topic	Learning Outcomes	Activities	Assessment
Week 1	<i>Class 1</i> Introduction of the growth and development of animals – Life cycle.	<ul style="list-style-type: none">• Life cycle• Different animals and their life cycle	Discussion/Inquiry about life cycle (pre-assessment) Introduction of the frog life cycle <i>Activity 1</i> - Reproducing the frog life cycle Discussion/Inquiry of how to write a science report (students will lead the construction of the criteria to write a good science report) <i>Activity 2</i> - Writing a frog live cycle report	<i>What I want my students to know?</i> <ul style="list-style-type: none">• Every living thing has a life cycle• Frog life cycle• Write science report
	<i>Class 2</i> Classification of a variety of animals, based on observable characteristics; e.g., limbs, teeth, body covering, overall shape, backbone, bones.	<ul style="list-style-type: none">• Group of species• Habitats• Classification	Discussion/Inquiry about life cycle (pre-assessment from class 1) Introduction of group species and habitats Butterfly life cycle <i>Activity 1</i> – Reproducing the butterfly cycle – In groups students will brainstorm and use their understanding of the butterfly cycle. They	<i>What I want my students to know?</i> <ul style="list-style-type: none">• Refresh the last class (frog life cycle)• Understand that living things are different• Know the butterfly life cycle

			<p>will represent it in panel. (Before finalize the panel understand criteria for a good panel. Students are invited to create their own criteria of a good panel. Teacher can guide and show sample of good works - panels)</p> <p>Activity 2 – Students will start building a class community chart with different animals and their species classification.</p> <p>Material: Videos about life cycle Frog and butterfly life cycle pictures Craft materials Rubric and examples of how to write a science report Samples of panels and charts</p>	<ul style="list-style-type: none"> Know how to classify <p>Cross Curriculum: Math – Classification (Statistics and Probability) ELA – Writing about science ART – Self-expression</p>
Week 2	<p>Class 3 Introduction of vertebral and intervertebral animals.</p>	<ul style="list-style-type: none"> Vertebral and Intervertebral 	<p>Discussion/Inquiry about life cycle (pre-assessment from class 1 and 2) Introduction of vertebral and intervertebral animals connecting the frog and the butterfly.</p> <p>Activity 1 - Time to finish to write the science report Activity 2 – Time to finish the butterfly panel Activity 3 – Time to add more information on the class community chart. So far students will have frogs and butterflies information</p>	<p>What I want my students to know?</p> <ul style="list-style-type: none"> Refresh the last classes (frog and butterfly) Understand that living things have different structures Know how to classify Introduction of Vertebral and intervertebral

	<p>Class 4 Animals will be studied in groups: mammals, birds, fish, reptiles, amphibians and insects.</p> <p>Suggested examples include: gerbils, guppies, mealworms, tadpoles, worms, butterflies/moths. Additional examples from other animal groups might also be included: brine shrimp, isopods, spiders.</p>	<ul style="list-style-type: none"> • Species group • Life cycle 	<p>Discussion/Inquiry about life cycle (pre-assessment from last classes) Chicken life cycle Study of group species and habitats connecting frogs, butterflies and chickens</p> <p>Activity 1 – Students will draw a chicken life cycle in a paper of sheet. Activity 2 – Finalizing the butterfly panel Activity 3 – Students will add the chicken information to the class community chart animal species.</p> <p>Material: Videos about life cycle Frog, butterfly and chicken life cycle pictures Craft materials Rubric and examples of how to write a science report Samples of panels and charts Examples of vertebral and intervertebral animals Species group examples Chicken infographic paper sheet.</p>	<p>What I want my students to know?</p> <ul style="list-style-type: none"> • Refresh the last classes (frog and butterfly) • Chicken life cycle • Understand that living things have different backgrounds • Know how to classify • Connect different species, their background and life cycle <p>Cross Curriculum: Math - Groups Math – Classification (Statistics and Probability) ELA – Writing about science ART – Self-expression</p>
Week 3	<p>Class 5 Introduction of the egg, larva, pupa and adult stages.</p>	<ul style="list-style-type: none"> • Different stages of the life cycle 	<p>Discussion/Inquiry about life cycles studied so far (pre-assessment from past classes)</p> <p>In group, analyse the class community chart to find out</p>	<p>What I want my students to know?</p> <ul style="list-style-type: none"> • Refresh the last classes (frog, butterfly and chicken) • Recognize local living

			<p>differences or connections between frogs, butterflies and chickens.</p> <p><i>Activity 1</i> – Visit to the local wet lands to find out what kind of animals live around the school neighbourhood. Student will take pictures and make notes of local animals. Examples of possible animals to be found are ducks, birds and any kind of insects.</p> <p>Students will visit again the local wet lands in Spring to observe the changes in nature accommodating new animals.</p> <p><i>Activity 2</i> – To wrap up the day students will gathered to discuss what kind of animals and environment they saw at the wet lands and to discuss what possible changes will happens when season changes. Students will choose one animal found at the wet lands to be studied on the next class. Total of 2 will be studied.</p>	<p>things</p> <ul style="list-style-type: none">• Recognize that when the environment changes it affects the local living things.
<p>Class 6</p> <p>Prediction of the next stages in the growth and development in an animal life cycle.</p> <p>Use of one animal from each of the following groups: mammals, birds, fish, reptiles, amphibians</p>	<ul style="list-style-type: none">• Prediction and development in life cycle	<p>Discussion/Inquiry about cycles studied so far (pre-assessment from past classes) and visit to the wet lands.</p> <p>Introduction and study of the first wet land chosen animal.</p>	<p>What I want my students to know?</p> <ul style="list-style-type: none">• Refresh the last classes (frog, butterfly and chicken) and wet lands animals• Recognize that	

	<p>and insects to identify similarities and differences in their developmental sequences.</p>	<p>Introduction of mammals. Students will choose between a few options which animal they want to study next. (includes a human baby)</p> <p>Students will choose the second wet land animals to be studied. No repetitions.</p> <p>Activity 1 – In small groups students will analyze pictures of the wet lands and produce their own infographic of the animal life cycle. They will not have a specific animal. The idea is that the students understand what is in common that helps any animal to survive. They will have to think in key words fundamental in an animal life. They will answer the question: <i>What an animal needs to live?</i></p> <p>Activity 2 – Students will add more information in the class community chart animal (mammals and the wet land animal).</p> <p>Material: All other materials used on the last classes Volunteers to help with the wet lands visit IPad or cameras Wet lands animals pictures and videos Student pictures from the wet lands Mammals pictures and videos</p>	<p>living things need a specific environment to develop</p> <ul style="list-style-type: none"> • Know the mammals live cycle • Predict next stages in growth and development from frogs, butterflies, chickens, wet land animals and mammals <p>Cross Curriculum: ELA – Writing about living things</p> <p>Social Studies – Communities in the world</p> <p>ART – taking pictures</p>
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Week 4	<p><i>Class 7</i> Identification of the food needs of at least one animal from each of the following groups: mammals, birds, fish, reptiles, amphibians and insects describing changes in how each animal obtains food through different stages of their life.</p>	<ul style="list-style-type: none"> Species group food needs 	<p>Discussion/Inquiry about cycles studied so far (pre-assessment from past classes) and visit to the wet lands.</p> <p>Introduction and study of the second wet land chosen animal.</p> <p>Introduction and study of the mammal chosen by the students.</p> <p><i>Activity 1</i> – Students will add information on the class community chart animal species of the second wet land animal and the mammal chosen to be studied. Also, students will add extra information they found on the Activity 1 class 6. <i>What an animal needs to live?</i></p> <p><i>Activity 2</i> – Students will write about the wet land visit.</p> <p><i>Activity 3</i> – Student will use iPad Apps or Smart board to play a mammals game</p> <p>Material: All other material used on the last classes Wet lands animals pictures and videos Student pictures from the wet lands Mammals pictures and videos Species chart to demonstrate</p>	<p><i>What I want my students to know?</i></p> <ul style="list-style-type: none"> Refresh the last classes (frog, butterfly and chicken) and wet lands animals Recognize that living things have different needs Know the mammals live cycle Predict next stages in growth and development in different species Compare and understand different needs for each specie studied so far <p>Cross Curriculum: ELA – Writing about living things</p> <p>Social Studies – Communities in the world</p> <p>ART – taking pictures</p>

			which animals had already been studied	
Week 5	<p>Class 8 Introduction of animal parental care and its characteristics.</p> <p>Class 9 Introduction of animal habitats. Recognizing adaptations of young animals to their environment, and identification of the changes in their</p>	<ul style="list-style-type: none"> • Animal Parental Care • Habitats • Environments • Relationships and connections with life cycle 	<p>Discussion/Inquiry about cycles studied so far (pre-assessment from past classes) and visit to the wet lands. Introduction of some of the Canadian mammals (Bear, Fox, Squirrel, Beaver, Marmot, and Dear). Introduction of the human mammal.</p> <p>Activity 1 – Students will have a Canadian mammal’s picture and in group will write a list of their characteristics, food needs, environment, and parental needs. Every group will present their discovery and the information will be organized in a panel (panel only for Canadian mammals).</p> <p>Activity 2 – The class will brainstorm the needs and characteristics of a baby human. The information will be added to the class community chart.</p> <p>Review all animal life cycles studied so far connecting every animal with their adult life cycle.</p> <p>Introduce the animal classes table. Classify all animals</p>	<p><i>What I want my students to know?</i></p> <ul style="list-style-type: none"> • Recognize Canadian mammals • Recognize and compare the care that animal needs. Compare human being to animals • Predict next stages in growth and development in mammals <p><i>What I want my students to know?</i></p> <ul style="list-style-type: none"> • Different animals habitats and their environments

	relationship to their environment as it goes through life.		<p>studied with the table and add all the extra information on the class community chart life cycle animal.</p> <p>The focus of this class is to lead the student to understand what happens with the animal when it goes to the young or adults phase.</p> <p>Activity 1 – Student will start writing a story with the theme: <i>“If I were a baby living in the forest.”</i></p> <p>To the next classes students will decide from the class table animals which animal they want to study next. Must be an animal not studied yet.</p>	<ul style="list-style-type: none"> Predict next stages in growth and development in mammals
Class 10	Identification of environmental conditions examples that may threaten animal survival or even threaten their extinction.	<ul style="list-style-type: none"> Environment conditions Process of extinction 	<p>Introduction of environment conditions that may threaten animal survival</p> <p>Students will check the list of animal threaten or in extinction</p> <p>Students will have an outlook of the animal from the class table chosen in the previous class</p> <p>Activity 1 – In small groups students will brainstorm a list of possible problems of the animal extinction issue</p> <p>Activity 2 – Time to finish</p>	<p>What I want my students to know?</p> <ul style="list-style-type: none"> Environments that may threaten or extinct animals Students will know which animals are in dangerous Students will start thinking in problems and solutions for help animals in extinction

			<p>the writing: <i>"If I were a baby living in the forest."</i></p>	
	<p><i>Class 11</i> Recognizing that habitat preservation can help maintain animal populations.</p>	<ul style="list-style-type: none"> • Preservation • Animal Population 	<p>Discussion/Inquiry about environment conditions that may threaten animal survival.</p> <p><i>Activity 1</i> – Base on the list written in the previous class with problems that may cause animal extinction students will propose a list of possible solutions for the problem. Every small group will take the stage and present their best idea. The class will then write a list with the solution ideas. Students will invite others classes to read their list. The learning community will be invited to be aware of the class list in pros to solve the animal extinction.</p>	<p><i>What I want my students to know?</i></p> <ul style="list-style-type: none"> • Problems can have a solution when the community think together to solve the problem • It is necessary to make the community aware of the problem and propose solutions
	<p><i>Class 12</i> Discuss with student actions that can assist habitat preservation.</p>	<ul style="list-style-type: none"> • Actions to habitat Preservation 	<p>Discussion/Inquiry refresh about environment conditions that may threaten animal survival.</p> <p>Introduction of major problems that may cause animal extinction, such as lack of clean water, retraction of natural habitat</p>	<p><i>What I want my students to know?</i></p> <ul style="list-style-type: none"> • Students will start thinking about the major environmental issues that affects animal

			<p>by excessive use of the land to agricultural propose or increase of population in need of living space.</p> <p>This last class of this unit is an introduction of a possible extension of the theme: recycle, forest conservation, sustainable growth, conscious economy consumption and etc.</p> <p>Material: All other material used on the last classes Wet lands animals pictures and videos Student pictures from the wet lands Mammals pictures and videos Species chart to demonstrate which animals had already been studied Chart with Canadian Animals and their differences Pictures and videos about the baby development Animal class chart, pictures and videos. List of animal threaten or in extinction</p>	<p>extinction</p> <p>Cross Curriculum: ELA – Writing about living things, storytelling and free writing Social Studies – Communities in the world, Global Citizen</p>
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Materials:

- Videos about life cycle
- Frog, butterfly and chicken life cycle pictures
- Craft materials
- Rubric and examples of how to write a science report
- Samples of panels and charts
- Examples of vertebral and intervertebral animals
- Species group examples
- Chicken infographic paper sheet.
- iPad Apps or Smart board to play games
- Wet lands animals pictures and videos
- Student pictures from the wet lands
- Mammal pictures and videos
- Species chart
- Chart with Canadian Animals
- Pictures and videos about the human baby development
- Animal class chart, pictures and videos.
- List of animal threaten or in extinction
- Any other relevant material

Assessment:

Students will be assessed in the beginning of each class when in group teacher brings the discussion to refresh their memory about last class's content. Also, learning proof will be produced during the classes and will be used as learning assessment. Examples of learning proof are:

- Reproduction of life cycles
- Class discussion/Inquiry of how promote learning
- Students will lead the construction of the criteria to write a good science report, create a panels, charts, lists, write stories
- Writing live cycle reports
- Group work to represent ideas, connect ideas and information, produce material
- Drawings
- Class community chart and panels
- Collection of data through observation of each individual's work, pictures and note taking
- Visit to the local wet lands to find and observe local animals living around
- Teacher observation
- Writing with specific purpose

Curriculum Connections

MATH – Classification (Statistics and Probability)

ELA – Writing about science, writing about living things, Free and imaginative writing

ART – Self-expression, art production, taking pictures

SOCIAL STUDIES – Communities in the world, Global Citizen

Reference:

Alberta Education – Elementary Science Plan of Studies:

<http://education.alberta.ca/media/654825/elemsci.pdf>

Alberta Education – Elementary Mathematics Plan of Studies:

http://education.alberta.ca/media/8775377/k_to_9_math_pos.pdf

Alberta Education – Elementary English Language Arts Plan of Studies:

<http://education.alberta.ca/media/307134/grade3.pdf>

Alberta Education – Fine Arts Plan of Studies:

<http://education.alberta.ca/teachers/program/finearts.aspx>

Alberta Education – Elementary Social Studies Plan of Studies:

<http://education.alberta.ca/media/456082/sockto3.pdf>

Jardine, G. & Hanson, A. *An Introductory Guide to Unit Planning – A concise guide to unit planning.*

Smart Board Lesson Plan and Games

www.education.smarttech.com

National Wildlife Federation:

www.nwf.org

Ausable Bayfield Conservation:

www.abca.on.ca

Canadian Wildlife federation Education

Active Guide – Project Wild

Lesson plan – Class 1

Grades: 3

Lesson Plan Title: Introduction of the Life Cycle

General Goal(s): This lesson will introduce the growth and development of animals – Life Cycle.

General outcomes

- Students will understand how an animal develop and grow in their environment. This lesson is part of a series of lessons to help students comprehend that every animal is different and have a specific need. The animal of this lesson is the frog.
- Students will learn how to work in groups to set criteria to produce a good work – write a science report.

Specific Objectives:

Introduce animal's life cycle studying the first animal: frog. Students will have a chance to discuss about the theme and ask questions about the frog life cycle. They will also perform activities to deep their knowledge on the subject.

Prior learning:

Students will use their previous knowledge about frogs in this class. It is possible that students have had contact with frogs before when playing in their neighbour, when traveling or camping.

Required Materials:

Videos and pictures about the frog life cycles, craft materials, rubric and examples of how to write a science report.

Step by step:

1. Student will see a short video about the frog life cycle. After, they will discuss and inquiry about the frog's life cycle. – ***Video and Discussion: 15 minutes***
2. Students will reproduce a frog's life cycle – Rubric in Resources – ***10 minutes***
3. Discussion and Inquiry of how to write a science report - Students will lead the construction of the criteria to write a good science report. Samples in Resources – ***15 minutes***
4. Writing a frog live cycle report – Students will start to write the report. They can keep work on the report in the next classes - ***10 minutes***

Total: 50 minutes

Assessment***What I want my students to know?***

- Every living thing has a life cycle
- Frog life cycle
- Write science report

Assessment will be done by teacher observations throughout student's discussions and comments. Also, students will be assessed with base on their work with the frog live cycle reproduction and the science report writing.

Extensions:

Math – Classification (Statistics and Probability)

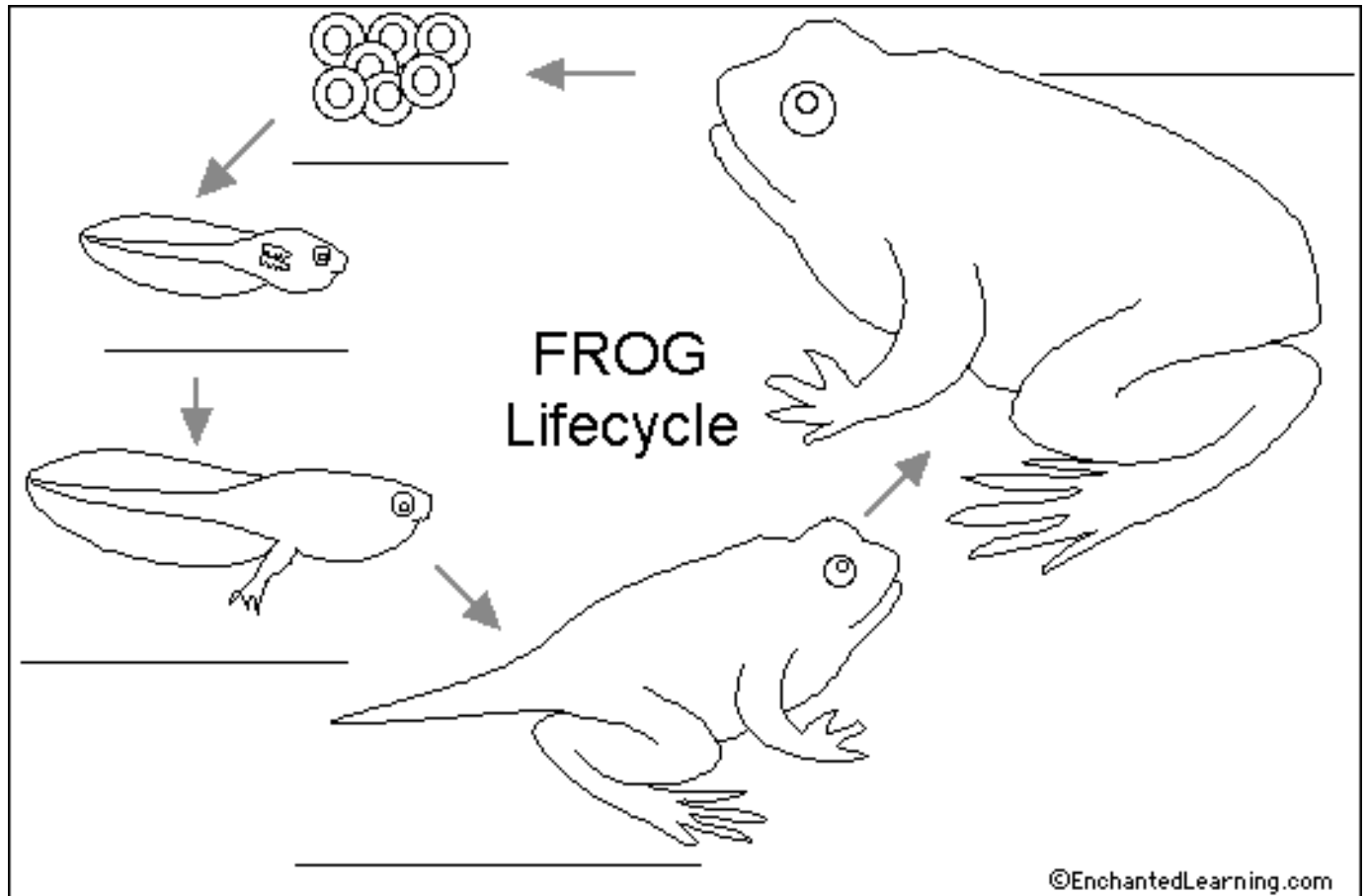
ELA – Writing about science

ART – Self-expression

Resources:

The Life Cycle of a Frog: <https://www.youtube.com/watch?v=rJOOxIFs9Is>

Frog's life cycle rubric:



Samples of the frog's life cycle report:



Writing Bug

Name: _____

Take Care of the Earth

What threats face the earth today? How does it help when we reduce, re-use and recycle? What are some things we all can do to protect the planet?

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

Try These Ideas:

- What are some challenges we face in getting rid of trash?
- What are two good reasons to recycle?
- Name three ways in which you can help protect the planet.



name: _____ date: _____ number: _____

animal research

This is a _____

It is a _____

mammal	amphibian	reptile
insect	bird	fish

because it has _____

It is a _____

carnivore	herbivore	omnivore
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because it eats _____

and _____

© Pam Wu 2012

	4	3	2	1
Paperwork	<ul style="list-style-type: none"> Rubric and Science Fair Record Sheet are both attached, Name is written on the rubric 	<ul style="list-style-type: none"> Record sheet is missing or name is not on the rubric 	<ul style="list-style-type: none"> Rubric with name is missing 	<ul style="list-style-type: none"> Neither the rubric or the record sheet is included.
Paragraph #1	<ul style="list-style-type: none"> Paragraph 1 introduces the project, states the question and the hypothesis. 	<ul style="list-style-type: none"> Paragraph 1 is missing either the introduction, the question or the hypothesis. 	<ul style="list-style-type: none"> Paragraph 1 only includes the introduction, the question or the hypothesis. 	<ul style="list-style-type: none"> Paragraph 1 does not include the necessary elements.
Paragraph #2	<ul style="list-style-type: none"> Paragraph 2 includes the planning, procedure, items needed and explanation of experiment. 	<ul style="list-style-type: none"> Paragraph 2 is missing either the planning, procedure, items needed or experiment explanation. 	<ul style="list-style-type: none"> Paragraph 2 includes only hte planning procedure, items needed or experiment explanation. 	<ul style="list-style-type: none"> Paragraph 2 includes none of the necessary elements.
Paragraph #3	<ul style="list-style-type: none"> Paragraph 3 fully and clearly explains what happened and the conclusion. 	<ul style="list-style-type: none"> Paragraph 3 adequately explains what happened and the conclusion. 	<ul style="list-style-type: none"> Paragraph 3 explains what happened OR the conclusion. 	<ul style="list-style-type: none"> Paragraph 3 does not adequately explain what happened or the conclusion.
Spelling	<ul style="list-style-type: none"> All words are spelled correctly. 	<ul style="list-style-type: none"> 1-3 misspelled words. 	<ul style="list-style-type: none"> 4-6 misspelled words. 	<ul style="list-style-type: none"> More that 6 misspelled words.
Punctuation	<ul style="list-style-type: none"> Punctuation is all correct. 	<ul style="list-style-type: none"> 1-3 punctuation mistakes. 	<ul style="list-style-type: none"> 4-6 punctuation mistakes. 	<ul style="list-style-type: none"> More than 6 punctuation mistakes.
Capitalization	<ul style="list-style-type: none"> Capitalization is all correct. 	<ul style="list-style-type: none"> 1-3 capitalization mistakes. 	<ul style="list-style-type: none"> 4-6 capitalization mistakes. 	<ul style="list-style-type: none"> More than 6 capitalization mistakes.

Camden County Schools

6th Grade Research Essay

Name: _____

Teacher: _____

	Criteria				Points
	4	3	2	1	
Introduction/ Topic	Student(s) properly generate questions and or problems around a topic .	Student(s) generate questions and or problems.	Student(s) require prompts to generate questions and or problems.	Questions or problems are teacher generated .	_____
Conclusions Reached	Numerous detailed conclusions are reached from the evidence offered.	Several detailed conclusions are reached from the evidence offered.	Some detailed conclusions are reached from the evidence offered.	A conclusion is made from the evidence offered.	_____
Information Gathering	Information is gathered from multiple electronic and non-electronic sources and cited properly .	Information is gathered from multiple electronic and non-electronic sources.	Information is gathered from limited electronic and non-electronic sources.	Information is gathered from non-electronic or electronic sources only .	_____
Summary Paragraph	Well organized, demonstrates logical sequencing and sentence structure.	Well organized, but demonstrates illogical sequencing or sentence structure.	Well organized, but demonstrates illogical sequencing and sentence structure.	Weakly organized.	_____
Punctuation, Capitalization, & Spelling	Punctuation and capitalization are correct .	There is one error in punctuation and/or capitalization.	There are two or three errors in punctuation and/or capitalization.	There are four or more errors in punctuation and/or capitalization.	_____
				Total---->	_____

Teacher Comments:

Useful Links:

Alberta Education – Elementary Science Plan of Studies:

<http://education.alberta.ca/media/654825/elemsci.pdf>

Alberta Education – Elementary English Language Arts Plan of Studies:

<http://education.alberta.ca/media/307134/grade3.pdf>

Alberta Education – Fine Arts Plan of Studies:

<http://education.alberta.ca/teachers/program/finearts.aspx>

National Wildlife Federation:

www.nwf.org

Ausable Bayfield Conservation:

www.abca.on.ca

Books:***Teacher reference***

Canadian Wildlife federation Education

Active Guide – Project Wild

Student's reference

Frogs! Strange and wonderful - Pringle, Laurence

Frog - Sleigh, Charlotte

Growing frogs - French, Vivian

Lesson plan – Class 2

Grades: 3

Lesson Plan Title: Introduction of the Life Cycle

General Goal(s): This lesson will introduce the growth and development of animals – Life Cycle.

General outcomes

- Students will start to classify a variety of animals, based on observable characteristics; e.g., limbs, teeth, body covering, overall shape, backbone, bones and classes.
- Students will understand how an animal develop and grow in their environment/habitat. This lesson is part of a series of lessons to help students comprehend that every animal is different and have a specific need. The animal of this lesson is the butterfly.
- Students will learn how to work in groups to plan and produce a panel showing the butterfly's life cycle.

Specific Objectives:

Introduce animal life cycle studying the butterfly. Students will have a chance to discuss about the theme and ask questions about the butterfly's life cycle. They will also perform activities to deep their knowledge on the subject.

Prior learning:

Students will use their previous knowledge about butterflies in this class. It is possible that students have had contact with butterflies before when playing in their neighbour, when traveling, camping or visiting the local zoo.

Required Materials:

Videos and pictures about the butterfly's life cycle, craft materials, rubrics and samples of panels and charts.

Step by step:

1. Student will see pictures of the butterfly's life cycle. After, they will discuss and inquiry about the butterfly life cycle. – Pictures and Discussion: ***15 minutes***
2. In small groups students will reproduce the butterfly's life cycle. Examples of the reproduction: Drawing, writing, sketching, demonstration using step by step etc. – ***10 minutes***
3. Discussion and Inquiry of how to produce a panel - Students will lead the construction of the criteria to set up a good panel. Teacher can guide and show samples of good works – panels. This project will be carried for the next 2 or 3 classes. Samples in Resources – ***15 minutes***
4. Students will start to set up a chart with the last two animals studied (Frog and Butterfly) information classifying them by classes and its characteristics. This chart will be used to demonstrate information of the next animals to be studied. The chart is a project that will be carried until the last school period or until the subject animal life cycle is completely done. See samples in Resources - ***10 minutes***

Total: 50 minutes

Assessment***What I want my students to know?***

- Understand that living things are different
- Know the butterfly life cycle
- Know how to classify

Assessment will be done by teacher observations throughout students' discussions and comments. Also, students will be assessed with base on their work with the butterfly live cycle demonstration, ideas for the panel and information chart.

Extensions:

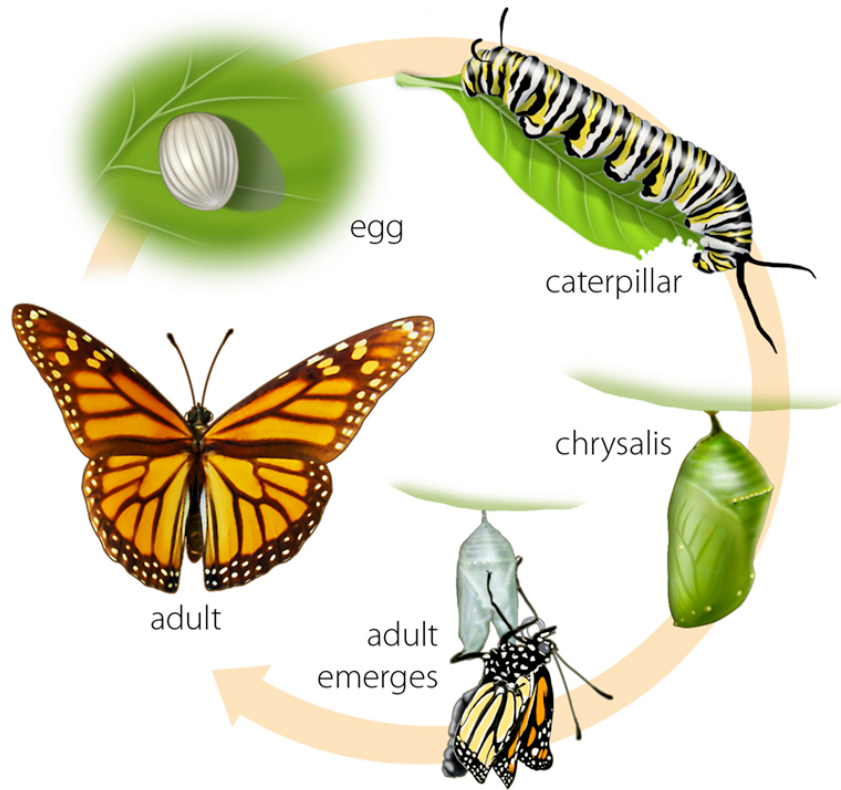
Math – Classification (Statistics and Probability)

ELA – Writing about science

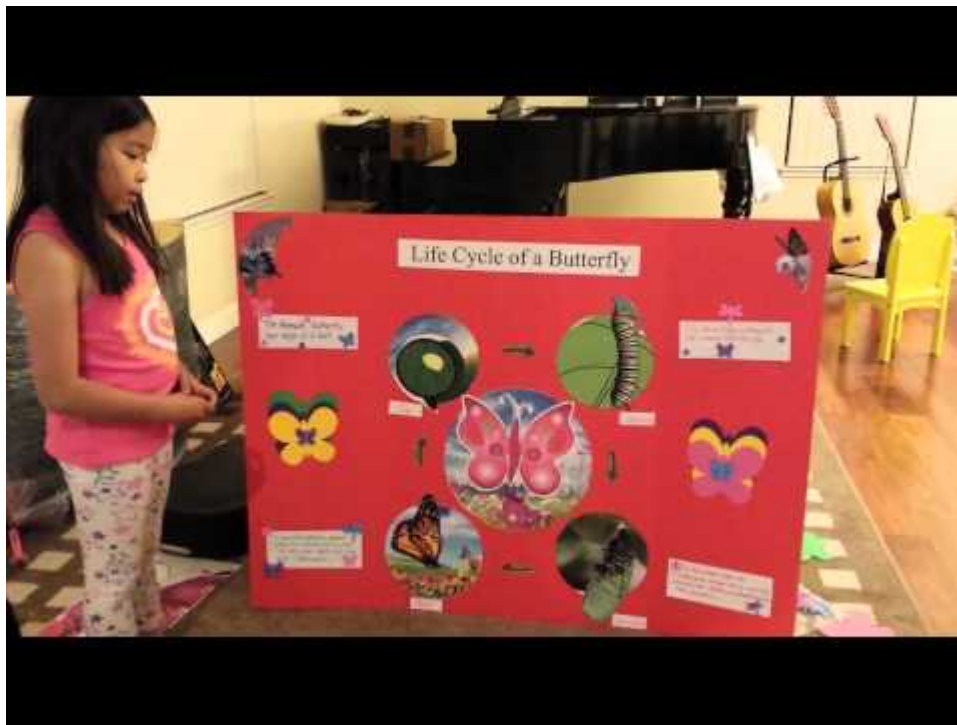
ART – Self-expression, fine art pieces demonstrations

Resources:

Samples of the butterfly's life cycle:



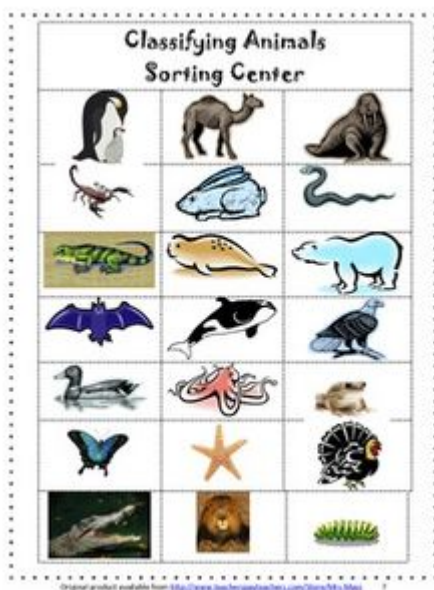
Samples of panels:







Sample of animals chart information:



Phylum	Sample Animals	Body Cavity (Coelom)	Body Symmetry	Nervous System, if yes briefly describe	Circulatory System, if yes briefly describe	Digestive System, if yes briefly describe
Porifera						
Cnidaria						
Platyhelminthes						
Mollusca						
Annelida						
Nematoda						
Arthropoda						
Echinodermata						
Chordata						

Classifying Animals					
	Fish	Amphibians	Reptiles	Birds	Mammals
Warm-blooded or Cold-blooded					
Type of Body Covering					
Live Birth or Hatched From Egg					
Feed Young with Milk (Yes/No)					
Has a skeleton					
Breathe with Lungs or Gills					

Useful Links:

Alberta Education – Elementary Science Plan of Studies:

<http://education.alberta.ca/media/654825/elemsci.pdf>

Alberta Education – Elementary English Language Arts Plan of Studies:

<http://education.alberta.ca/media/307134/grade3.pdf>

Alberta Education – Fine Arts Plan of Studies:

<http://education.alberta.ca/teachers/program/finearts.aspx>

National Wildlife Federation:
www.nwf.org

Ausable Bayfield Conservation:
www.abca.on.ca

Books:

Teacher reference

Canadian Wildlife federation Education
Active Guide – Project Wild

Student's reference

A Butterfly's Life - Jennifer Prior

The Life Cycle Of A Butterfly - Lisa Trumbauer

Rookie Read-About Science - Life Cycles: Caterpillar to Butterfly - Lisa M Herrington

The Life Cycles of Butterflies: From Egg to Maturity, a Visual Guide to 23 Common Garden
Butterflies - Judy Burris, Wayne Richards