

Grade One Unit Plan

Introduction

This science-based unit has been designed to engage students in active, hands-on learning about ecosystems beginning with a review of what is a living thing, followed by activities to explore the basic needs of living things. The unit will move on to study how seasonal changes affect living things. The unit concludes with a field trip to study a local ecosystem. Linking lesson references are provided for those who wish to further student learning for a given topic.

How to use this Unit Plan

The Unit Plan was developed assuming **two 20-30 minute Science blocks per week with one entire morning or afternoon block for a field trip to a local wetland ecosystem**. This unit is best taught in winter or spring, when the ability to read, write and report independently is more established.

A 7-week implementation, broken down into 10 lesson plans, is outlined in the following Unit Plan Chart. The time line is variable based on the activities you choose. Teaching suggestions are given in the “Tips” section. The Assessment column indicates that an Assessment Tool and Rubric is available and can be found on the Teacher CD. The Dragonfly Symbol indicates that the lesson has a component of physical activity.



Resources used to develop unit plan:

Project WILD – this activity guide contains 121 activities focused on environmental and conservation education.

Leap Into Action! Simple Steps to Environmental Action - this resource will assist you and your students in choosing, planning and implementing action learning in your classroom.

Wild BC provides numerous publications and workshops for educators. Over 20 activity guides developed to increase environmental literacy are available. To obtain any of the publications listed above, please contact Wild BC at 250 356 7111 or 1 800 387 9853 or visit our website at www.hctf.ca/wild.htm


Your Notes Here

Grade One Unit Plan



Week 1

Week 2

Lesson at a Glance	Summary	B.C. Min. of Education Learning Outcomes	Linked Activities	Assessment	Teaching Tips
Lesson 1 <i>Microtrek Scavenger Hunt</i> Project WILD p. 20 Two 20-min blocks Fall/Spring Outdoor 	<p>Goal: reviewing examples of living and non-living things .</p> <p>How: students go outside on a 'scavenger hunt' for wildlife.</p>	<p>Processes of Science</p> <ul style="list-style-type: none"> classify objects, events and organisms 	<p><i>What's Wild?</i> Project WILD p. 2</p> <p><i>Museum Search for Wildlife</i> Project WILD p. 87</p> <p><i>Wildlife is Everywhere</i> Project WILD p. 18</p>	<p>✓</p>	<ul style="list-style-type: none"> During this activity, keep a dual focus – what is living vs. non-living and what evidence of wildlife can be found. Take a walk around your schoolyard and give students a task: collect objects from the ground; in class have students sort their items in two groups (what they think are living and non-living things); in a circle give each student the chance to share. Have students create a t-chart in their journals and draw the living and non-living things in each column.
Lesson 2 <i>Everybody Needs a Home</i> Project WILD p. 26 One 20- min block Any Season Indoor	<p>Goal: understanding the basic needs of humans and other animals</p> <p>How: students draw pictures of homes and compare their needs with those of other animals.</p>	<p>Processes of Science</p> <ul style="list-style-type: none"> Communicate their observations, experiences and thinking in a variety of ways Classify objects, events, and organisms <p>Life Science</p> <ul style="list-style-type: none"> Describe the basic needs of local animals Describe how the basic needs of animals are met in their environment 	<p><i>Stormy Weather</i> Project WILD p. 22</p> <p><i>Ants on a Twig</i> Project WILD p. 9</p>	<p>✓</p>	<ul style="list-style-type: none"> Before beginning the activity, as a class work together to create a web that includes what we need to live. In our homes, how do we get these things? (market/garden=food, home=shelter, backyard/room=space, tap=water etc.). You may wish to have students draw an image of their own home in the centre of a large piece of paper (11 X 17). Then have students draw the necessary parts of their homes – grocery store, school, friends house, bedroom in detail, etc. – as satellite images out from the central image.

Grade One Unit Plan



Week 2

Week 3

Lesson at a Glance

Summary

B.C. Min. of Education Learning Outcomes

Linked Activities

Assessment

Teaching Tips

Lesson 3
What's That, Habitat?
Project WILD p. 36
One 20-min block
Any Season
Indoor



Lesson 4
Habitat Lap Sit
Project WILD p. 28
One 20-min block
Any Season
Any Setting

Lesson 5
Habitat Rummy
Project WILD p. 38
Two 20-min blocks
Any Season
Indoor

Goal: generalizing that humans and other animals have the same basic needs.

How: students draw pictures of peoples' and animals' homes comparing basic needs.

Goal: introducing the idea of interdependence.

How: students form a physically interconnected circle to demonstrate components of habitat.

Goal: students compare the habitat needs of different species.

How: students make cards and play a card game.

Processes of Science

- Communicate their observations, experiences and thinking in a variety of ways
- Classify objects, events, and organisms

Life Science

- Describe the basic needs of local plants and animals
- Describe how the basic needs of plants and animals are met in their environment

Life Science

- Describe the basic needs of local plants and animals
- Describe how the basic needs of plants and animals are met in their environment

Processes of Science

- Communicate their observations, experiences and thinking in a variety of ways
- Classify objects, events, and organisms

Life Science

- Describe how the basic needs of plants and animals are met in their environment

What Bear Goes Where?
Project WILD p. 122



What's for Dinner?
Project WILD p. 46



Are You Me?
Project WILD p. 64



- Use the drawings from lesson 2 for this lesson and omit steps 4 and 7 from this activity.

- Although this activity is listed for grades 4-7, younger students enjoy it too.
- Use the habitat card masters provided to create a set of cards for each group of two to three students.
- You may wish to replace or supplement the text on the habitat information chart with the corresponding images.
- When you have worked through the activity, have students select an animal and create a series of five habitat rummy cards for that animal. Have students create a similarly sized illustration of the animal and then hang all six cards together vertically to display them.

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Lesson at a Glance

Summary

B.C. Min. of Education Learning Outcomes

Linked Activities

Assessment

Teaching Tips

Week 4

Lesson 6
Make a Coat
(Modified)
Project WILD p. 101
Two 20-min blocks
Any Season
Indoor

Goal: understanding how seasonal changes affect animals.

How: students make replicas of coats using different materials.

Processes of Science

- Communicate their observations, experiences and thinking in a variety of ways

Earth and Space Science

- Describe changes that occur in daily and seasonal cycles and their effects on living things

Life Science

- Describe the basic needs of local plants and animals

Colour Crazy
Project WILD p. 11



Use the following adaptations for this lesson:

- Prepare the coat patterns for tracing (p. 103). Omit stitching dots.
- Instead of being about human need for clothing, the focus should be on animal coats and why they are different.
- Brainstorm with students a variety of animals and what their coats are like. Include mammals, reptiles, fish, insects and birds in the brainstorm.
- Provide each student with a large piece of butcher paper and have them trace and then cut out their coat. Students should then decorate their coat to represent the animal of their choice. They may add other features such as a tail or ears.
- Assist students in stapling the sides of the coat closed. When all coats are complete. Have each student put theirs on and individually explain what kind of animal they are and how their coat helps them in changing seasons.
- How are they the same? How are they different?
- Show images of animals that have coats which change with the seasons. For example, snowshoe hare, long-tailed weasle, ptarmigan, arctic fox all change colour between winter and summer seasons. Birds and fish change colour in mating season to attract a mate. Other animals grow thicker fur for the winter - e.g caribou, dogs, cats and horses.

Grade One Unit Plan



Week 5

Week 6

Lesson at a Glance

Summary

B.C. Min. of Education Learning Outcomes

Linked Activities

Assessment

Teaching Tips

Lesson 7
Seed Need
Project WILD p. 95
Two 20-min blocks
Early Fall
Outdoors



Goal: discovering how animals help plants.

How: students gather seeds by going outside with socks over their shoes.

Processes of Science

- Classify objects, events and organisms
- Earth and Space Science
- Describe changes that occur in daily and seasonal cycles and their effects on living things

Life Science

- Describe the basic needs of local plants and animals
- Describe how the basic needs of plants and animals are met in their environment

What's for Dinner?
Project WILD p. 46



- Be sure to emphasize why plants need seeds.
- Also draw attention to the time of year at which this lesson is being conducted. Seed dispersal is a seasonal event. Seeds become ready just as animals need to feed their young and/or migrate. Seeds provide an excellent food source for them and in return, plants get to have their seeds spread far and wide.

Lesson 8
Oh Deer!
Project WILD p. 206
One 20-min block
Outdoor
Any Season



Goal: looking at population changes due to habitat and seasonal changes.

How: students become deer and components of habitat in a highly involving physical activity.

Earth and Space Science

- Describe changes that occur in daily and seasonal cycles and their effects on living things

Life Science

- Describe the basic needs of local plants and animals

How Many Bears Can Live in This Forest?
Project WILD p. 156



- You may wish to provide each student with three cards: Food, Water and Shelter. Students use these instead of the hand gestures to prevent confusion and sudden changes in needs/components.
- Give students reasons for the changes for some of the years by manipulating what the habitat components can be e.g. all students must be food or shelter as it is the middle of summer and no water can be found. Or it is deep winter and all the water is frozen.
- On other rounds, ask students for reasons why so many deer might have died or survived on the round.

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Lesson at a Glance

Summary

B.C. Min. of Education Learning Outcomes

Linked Activities

Assessment

Teaching Tips

Week 6

Lesson 9



Migration Headache
(Modified)
Project WILD p. 237
One 20-min block
Any Season
Indoor or Outdoor

Goal: learning about limiting factors in the environment.

How: students role play migrating water birds travelling between nesting habitats and wintering grounds and are subject to hazards at either end of the migration path as well as along the way.

Earth and Space Science

- Describe changes that occur in daily and seasonal cycles and their effects on living things

Life Science

- Describe the basic needs of local plants and animals

The Thicket Game
Project WILD p. 137



- Simplify this activity by focusing on the active portion, rather than the lengthy background.
- You may wish to keep the limiting factors to weather events and thus on seasonal changes and their effects.
 - Limiting factors – storms on the way, storms at either end, predation, lack of food due to flooding or drought
 - Favouring factors – great weather, lots of food, very few predators, lots of rain to make wetlands but without storms.

Week 7

Lesson 10



Urban Nature Search
Project WILD p. 127
One 40 – 60 min block
Fall/Spring
Outdoor

Goal: learning about local plants and animals.

How: students go outside to observe the environment, using a questionnaire to assist in gathering data.

Processes of Science

- Communicate their observations, experiences and thinking in a variety of ways
- Classify objects, events, and organisms

Life Science

- Describe how the basic needs of plants and animals are met in their environment

Learning to Look, Looking to See
Project WILD p. 280



Improving Wildlife Habitat in the Community
Project WILD p. 348

- You may wish to create a scavenger hunt for your students to provide focus for this activity. The scavenger hunt should use images rather than text and direct students to look for suitable habitat components for various animals.
 - If possible, walk through a variety of habitat types – a busy road, a quiet lane, by a garden or park with lots of grass but few bushes, by a water feature, etc. Ask students to classify the different habitats by their usefulness to wildlife.
 - You may wish to include a picnic lunch or snack break along the way.

