

### Science Unit: Exploring Biodiversity Like a Scientist Lesson # 7: Forest Field Trip

#### Lesson Summary:

In this lesson, students will start to think more deeply about why animals look the way they do. They will brainstorm species we might expect to see on the upcoming forest field trip.

Grade level:	Presented to grade K-2; appropriate for grades K – 4 with age appropriate modifications
Duration of lesson:	60 minutes
School Year:	2015/2016
Developed for:	Collingwood Neighborhood School, Vancouver School District
Developed by:	Carla Crossman (scientist); Mily Phan and Nadine Kinna (teachers)

#### Objectives

- 1. Discovering the diversity of life found in the forest.
- 2. Ask questions and make observations of things they see in the forest.
- 3. To identify similarities and differences between life at the beach and life in the forest.

#### Materials

- Small shovels or hand trowels
- Magnifying glasses
- Small cups
- Mini clipboards
- Worksheets
- Crayons

#### **Background Information**

So many students will have gone to the park, but not *really* looked at the plants and animals that lives there. This trip will give students an opportunity to make more in-depth observations. Encourage students to get their hands dirty! Lift up branches/leaves and dig a bit into the soil. Finally, encourage students to ask questions.

### Lesson Detail

# 1. Be sure to review safety considerations appropriate for your group as soon as the students arrive.

2. Explain that the forest is an extremely **diverse** environment (i.e., there are lots of different *types* of plants and animals living in a forest.) In a forest, plants are everywhere and easy to find. Animals, however, are often hiding. Challenge students to take a closer look at this ecosystem.



#### Activity 1: Question Train

#### Purpose of Activity:

Have students make observations and ask questions on their forest walk.

#### Methods and Instructions:

- 1. The most important part of this activity is to clearly explain how it works to students and chaperones. Students will go on a short nature walk and learn about different things along the way.
- 2. Divide the classes and groups up into small groups (4-6 students, or group size can be dictated by the student: chaperone ratio). Each group will leave the starting place 2 minutes apart.
- 3. The first group stops at an interesting place. They take a few minutes to make observations and ask science questions. When each subsequent group passes by, the first group shares their ideas. The activity resembles leap frog (not telephone). The original group stays at the same station until all other groups have passed. Each group has a chance to share an interesting place.
- 4. Stopping points can be chosen at random by teachers, chaperones or students and can be conveniently placed at trail intersections to help the whole group go in the same direction.
- 5. Have them think about the basic needs of animals Where will they find shelter? What will they eat? On the forest floor, dead leaves and dead wood are being broken down by different insects. These insect are food for many birds and these birds are usually found in small shrubs or trees that provide shelter and food for small mammals like mice and squirrels.

#### Activity 2: Exploration and Leaf/Bark Rubbing

#### Purpose of Activity:

To get students excited about the animal life in the forest and taking a closer look at their surroundings.

#### **Methods and Instructions:**

- 1. Review the safe handling and touching of animals.
- 2. Let the students explore the forest in small groups with magnifying glasses, small shovels and small cups/bowls to look at insects closer up.
- 3. Have students collect 2 leaves. They should find dead leaves off the forest floor so as not to harm the living plants in the park. In order to prevent students from picking leaves you can create a rule where only chaperones can pick the leaves. They can go choose leaves with their chaperone and each chaperone is allowed to pick 1 fresh leaf per child, or X number per group etc.
- 4. Students can then take these leaves and use crayons to do rubbings of each leaf. With help, they can identify each leaf and write it in the blank below.

#### **Closure Discussion**

- 1. What did you see today?
- 2. How is the forest the same as the beach? How is it different?



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#### References

Field Guides. The National Audubon Society has a great selection of field guides from trees to insects to birds etc. They can be a great resources for quickly identifying species on the trail. <u>http://www.audubon.org/national-audubon-society-field-guides</u>

Description and Uses of Plant Foods by Indigenous Peoples. http://www.fao.org/wairdocs/other/ai215e/ai215e06.htm

Turner, Nancy J. 1995. Food Plants of Coastal First Peoples. Royal British Columbia Museum Handbook, UBC Press, Vancouver.

Article highlighting the importance of Cedar for First Nations in BC. <u>http://indigenousfoundations.arts.ubc.ca/home/culture/cedar.html</u>