

Title of Lesson/Unit: Stump Sleuths

✓ Primary K-3

Big Ideas:

- Plants and animals have observable features

Curricular Competencies: - Students are expected to be able to do the following:

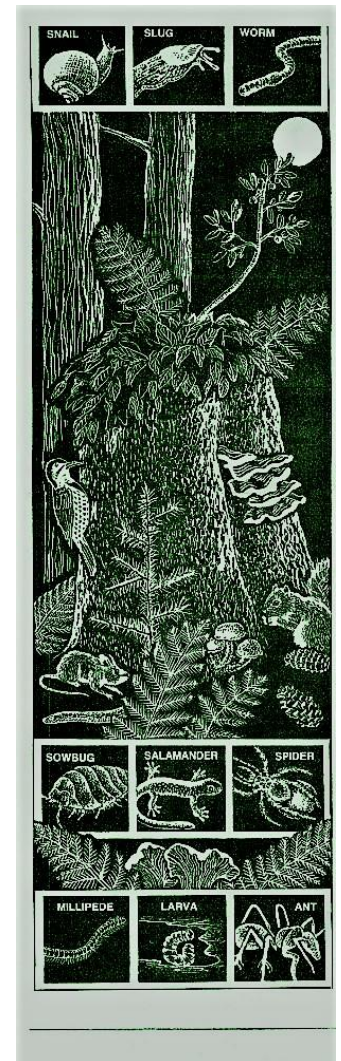
- Make and record observations using their senses
- Experience and interpret the local environment
- Ask questions about familiar objects and events
- Express & reflect on personal experiences of place
- Demonstrate curiosity and a sense of wonder about the world

Concepts & Content - Students are expected to know the following:

- [classification](#) of living and non-living things
- names of local plants and animals
- basic needs of plants and animals
- Local [First People's knowledge](#) of the local landscape, plants and animals

Objectives for This Activity:

- Students will be able to identify species of trees in the local forest.
- Students will be able to identify at least four other plant or animal species using the same habitat as their tree stumps
- Students will be able to speculate about the habitat's ability to meet the needs of these trees and plants.
- Students will be able to speculate about the trees stump's ability to contribute to the surrounding habitat. What kinds of creatures, insects, birds might call this home?
- Students will be able to share their observations about living things in their local environment to help others learn about their "place"



Pre-Class Preparation – Read “The Tree Stump” by Chris Ford & “The Giving Tree” by Shel Silverstein
What’s In a stump? Young detectives find some eye-opening answers on a sleuthing expedition that’s full of surprises and fun.

Location: An area with 1 decaying stump for every 4-5 children.

Materials:

- magnifiers
- drawing supplies and journals
- optional: bug boxes (clear magnifying boxes)
- In this activity, children explore a stump and discover that it supports a rich variety of living things.



Lesson plan

- Find a local site with decaying stumps and familiarize yourself with the plants, insects and other living things found in stumps. You might also want to collect field guides to take along for reference and/or use [inaturalist](#) to submit photos and get identification electronically.
- When you arrive at the site, divide the children into small groups (4-5 per adult), and ask each group to gather beside a stump.
- Introduce the stump as the remains of a tree that fell or was cut down, and ask the children to take a good look at its size and shape. Have some fun speculating how big the tree might have been, and what might have happened to it. Explain that while the stump is no longer a living tree, it's still a place where many living things can be found. Sometimes, [new trees even grow out of stumps](#), which help protect them from predators and provide nutrients. These are called "nurse logs".
- Ask the children to pretend they're detectives who have been assigned a challenging investigation – to see how many different living things they can find in, on and around the stump. When their investigation is complete, they may be surprised at just how much they've found.

Activity:

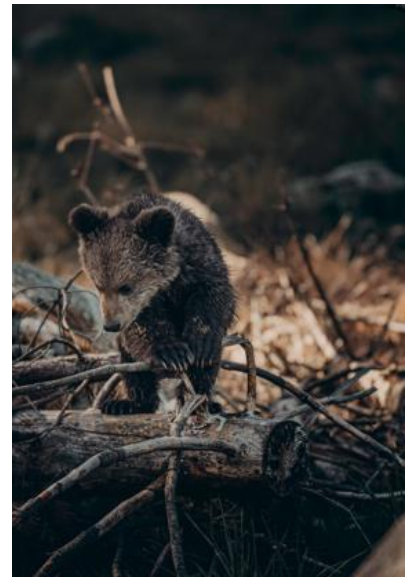
As the children search, help them recognize that the stump is a home to living things and so should be disturbed as little as possible. Encourage them to notice that the stump provides food as well as shelter. Help them identify their finds, and record these on a notepad for later discussion.

Who Lives Here? The first things the children may discover are seedlings, ferns and mosses, as well as fungi and lichens. Huckleberry bushes grow on the top of many stumps. The sleuths may also spot slugs, snails and salamanders, and when they look carefully under the bark and in cracks and hollows, they'll find crawly creatures such as sowbugs and larvae. Even bears like to tear apart rotten logs and feast on grubs and bugs.

A stump has visitors as well as residents. Encourage the children to look for calling cards – for example, feathers, droppings, woodpecker holes and half-eaten cones. Have fun talking about which creatures might have left the signs and what they might have been doing when they came to visit.

Looking Even Closer: A whole new world will open up when the children take a really close look at their discoveries. Help them use magnifiers to investigate mosses, lichens and fungi. It's also fun to compare how things look with and without magnifiers. Hairy legs and funny shapes will spring into view when insects are carefully placed in bug boxes. Use the plastic containers to temporarily hold slugs, snails and other crawlies for up-close investigation. Help the children return these creatures to the exact spot where they found them.

Detectives' Drawings: Hand out nature journals for students to draw in. Remind the children that all good detectives keep records of their discoveries, and ask them to make pictures of the living things they liked the most. Help label the drawings.



Reflect on their Learning: Ask the children to sit in a circle to discuss their investigations. Read out the list of their discoveries, and ask which ones were a surprise. Talk about the variety of living things found in a stump, and how a stump is a home and food source. With the group, take one last look to make sure all living things have been returned where they were found. Ask the children what they might tell their friends or families about the stump when they get home. Discuss the importance of protecting our natural environment.

Assessment/Evaluation

- Compare observations with those of others
- Make simple inferences based on their results and prior knowledge
- Sort and classify data
- Consider environmental consequences of their actions



Extensions/ Possible Cross-Curricular Connections

- BC [Indigenous culture](#) relies heavily on a close connection with the forest for wellbeing. Connect with local First Peoples and invite an elder or other member to share their stories of your local community and its history with students.
- Physical and Health Education: [Identify and describe practices that promote mental well-being](#). Explain how participation in [outdoor activities](#) supports connections with the community and environment.
- [Art Education](#): Experience, [document](#) and [share](#) creative works in a variety of ways. Students create an art display of the various drawings from their observations and share with others. Here's some [artwork from students all across BC](#), all ages to celebrate National Forest Week and how important forests are to our environment, landscapes, lifestyles and livelihoods.



RESOURCES:

- “The Tree Stump” by Chris Ford and “The Giving Tree” by Shel Silverstein
- iNaturalist – app for flora and wildlife species identification
- [Royal BC Museum](#) for information on traditional plant use
- Bandoni, Robert J. and Adam F. Szczawinski. Guide to Common Mushrooms of British Columbia. B.C. Provincial Museum, Handbook 24, Victoria: Department of Provincial Secretary
- Green, David M. and R. Wayne Campbell. The Amphibians of British Columbia. B.C. Provincial Museum, Handbook 45. Victoria:
- Ministry of Provincial Secretary & Government Services
- Lyons, C.P. Trees, Shrubs & Flowers to Know in British Columbia. Toronto: Dent
- Schisgall, Oscar. That Remarkable Creature, the Snail. New York: Julian Messner
- Schwartz, George I. and Bernice S. Life in a Log. Garden City, N.Y.: Natural History Press
- Simon, Seymour. Exploring Fields and Lots. Champaign, Ill.: Garrard
- The Stump Book. Vancouver: WEDGE. Available from the B.C. Teachers’ Federation, Zim, Herbert S. and Lucretia Krantz. Snails. New York: William Morrow.

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Some photos by [Pexels.com](https://www.pexels.com)