

Primary K-3

**Big Idea(s):** From the [Science curriculum](#). Lesson Plan by FORED BC Society, adapted from the Living Forest.

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

- Demonstrate curiosity and a sense of wonder about the world
- Make exploratory observations using their senses
- Experience and interpret the local environment
- Recognize First Peoples stories (including oral & written narratives), songs, and art, as ways to share knowledge
- Generate and introduce new or refined ideas when problem solving
- Communicate observations and ideas using oral or written language, drawing, or role-play
- Identify simple patterns and connections
- Make observations about living and non-living things in the local environment
- Sort and classify data and information using drawings or provided tables
- Express and reflect on personal experience of place

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

- basic needs of plants and animals
- adaptations of local plants and animals
- local First Peoples' uses of plants and animals
- water sources including local watersheds
- water conservation
- the knowledge of local First Peoples of ecosystems
- energy is needed for life sources of thermal energy

**Materials & Technologies** - Students will use the following materials, tools, equipment:

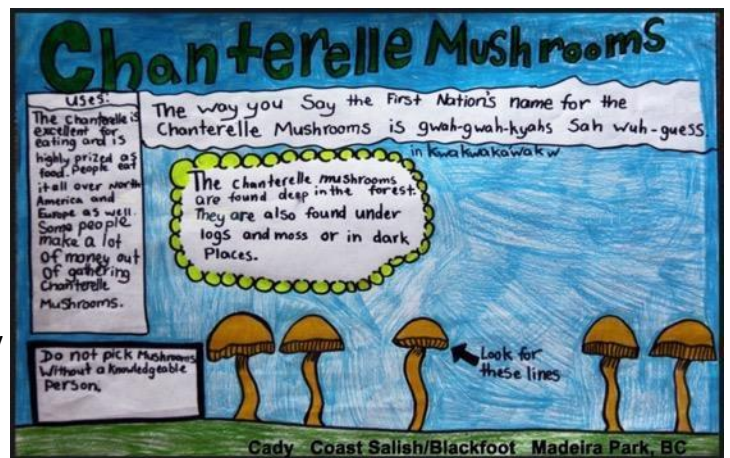
- Scissors, construction paper, story picture worksheet, glue or stapler, pencil and paper, Internet

**Pre-Class Preparation** - The teacher will need to make the following preparations prior to class:

- Watch the [Food Chain YouTube](#) video to select the parts to be shown. Additional [Lion King video](#) about the importance of the sun and the balance of life. And one more [here geared to primary students](#).
- Visit various links provided for background.
- Ensure enough copies of the **Story Pictures Worksheet** (at bottom) are provided for each student.

**LESSON PLAN**

- Play your preferred, above Youtube Video(s) to frame the activity about Food Chains.
- Describe how the energy stored by plants is passed on to the other species in the food chain: Sun,



Grass, Insects, Frogs, Rabbits, Bears. That's why some forms of life which are unable to convert the sun's energy themselves, and become dependent on other forms of life for their existence.

- Discuss all the various roles of the plants, animals and people in a food chain and food web. More info [here](#) & [here](#).

Food chain graphic credit: <https://www.freepik.com/vectors/jungle-safari>">Jungle safari vector created by brgfx - www.freepik.com</a>



- Have students cut the **Story Pictures Worksheet** apart and arrange their pictures into the correct order to show a simple food chain. They don't need to include all the pictures. They can staple them in order and attach a cover page to their booklet. Make a title page.
- Go for a walk outdoors to safely see some of the food chain components. Make observations, hypotheses about natural phenomena, journaling, and follow-up investigation. If possible, use <https://www.inaturalist.org/> to identify and record species sighted (easy app available). How many parts of the food chain did they find?
- Go birdwatching and identify the various beak adaptations; follow up with <http://www.allaboutbirds.org/> where students can learn more, including bird calls. If possible, use the Ibird app to identify and record sightings. Take part in the Great Backyard Bird Count in Feb each year <https://www.birdcount.org/participate/>
- Find animal poems, videos and relate them to the food chain. Or, have students write their own short story, create a cartoon/animation or poem incorporating food chain ideas. Some may even want to do their own class video (in higher grades).
- What role do the items in your food chain play in Indigenous cultures (i.e. traditional medicine, spiritual activity)? Lots of resources available from B.C. Indigenous peoples as part of a [Traditional Knowledge annual art contest](#) for youths as well as [UVIC](#) and [Abbotsford School District](#).
- What might happen if one of the items in the food chain were removed permanently, such as local water source or all the frogs? Check out <https://kids.nationalgeographic.com/explore/nature/save-the-earth-hub/>
- May include structural features (teeth, claws, beaks, camouflage) or behaviours (hibernation, migration, roosting, bird calls, that allow organisms to survive in the food chain. The chameleon (pictured) is an expert at camouflage.
- Plants: features may include roots, stems, leaves, flowers,
- Animals: features may include shape, size, feet, teeth, body covering, eyes, ears



## Resources & References

- Include study of habitat — food, water, shelter, and space. How do local plants and animals depend on their environment?
- Why is water important in the food chain? How can you conserve water in your home and school? How does water cycle through the environment? Use the CRD's [Every Drop Counts](#) program
- Calculate your water footprint [here](#). Learn how to conserve water [here](#).
- How do humans impact the food chain and where do we fit?
- How do local First Peoples knowledge of living things demonstrate interconnectedness?
- Energy is needed for life: flow of energy in the community from the sun. Producers (plants), consumers (animals), and decomposers (bacteria and fungi, beetles, earthworms, millipedes, termites, pill bugs, snails, and slugs)
- **Food chains:** the flow of food energy from one organism to another (e.g., grass to rabbit to eagle)  
**Food webs:** interconnecting food chains (e.g., a ladybug may be eaten by a frog)

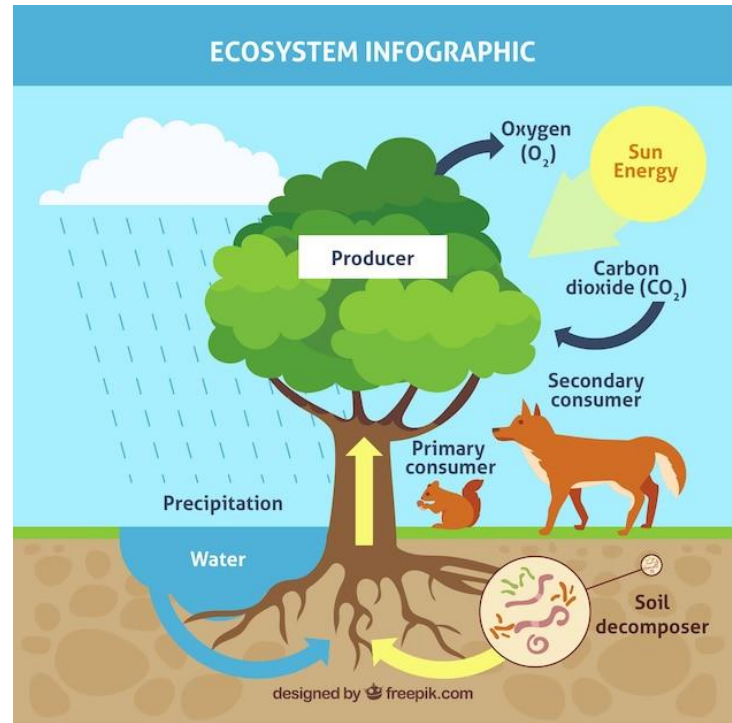


Photo credit: <https://www.freepik.com/vectors/ecosystem-infographic>>Ecosystem infographic vector created by freepik - www.freepik.com</a>

- [Food Chain Quiz](#)
- [Food Chain Examples](#)
- [Britannica Food Chain for Kids](#)
- [Examples of children's food chain artwork](#)

## Assessment/Evaluation

- Make simple inferences based on their results and prior knowledge
- Identify some simple environmental implications of their and others' actions
- Compare observations with those of others
- Ask questions about familiar objects and events
- Make simple predictions about familiar objects and events

## Adaptations/Modifications

- Robyn Ross, M.Ed, Special Needs, and a FORED volunteer, prepared the attached [Classroom Adaptations](#) plan to help teachers with diverse student needs.

## Extensions/Possible Cross-Curricular Connections

- **Art:** Ask students to draw their [perception of a food chain pyramid](#) showing primary, intermediate and secondary producers.
- **Math:** Ask students to estimate how many kilometres away from the [earth the sun is](#) (150 million kilometers), then ask them to look it up online in class. How does the sun's energy impact

plants/trees? (leaves drop) and animal behavior (i.e. hibernation)? “Early spring sun makes [it warm enough to wake up a hibernating black bear.](#)” What do humans like to do when they don’t get much sun during Winter Break? (i.e. travel to Mexico, Hawaii etc.) Some primary activities related to math and food web/chains [here in Jump Math.](#)

- [Personal Responsibility](#) - Have students make a school bulletin board showing others how to save water (eg. turn off the tap when brushing your teeth, use reusable water bottles...) and track their water usage to see if they can improve it.
- [First Peoples Principles of Learning](#): Forest fires can consume huge areas of BC, impacting the food chain and survival of various plants and animals. Indigenous peoples throughout history actually set fires to help manage nature and prevent forest fires. Why do you [think this might actually help](#) the food chain?

**Scroll down for Story Pictures Worksheet**

**STORY PICTURES WORKSHEET:**

