The Garden Food Chain

Connect – The garden is a great place to observe and learn about the importance of food chains. Each of the organisms living in the garden are interconnected and they depend on each other as well as the non-living features present in the garden, to live. It is important to understand how the food chain works so that we appreciate and respect each organism within it.

Teach – Discuss Garden Food Chains using the terms and descriptions below. As additional resources, use the videos "Fabulous Food Chains" and "The Dirt on Decomposers" from Crash Course Kids to help explain the terms.

- Fabulous Food Chains https://www.youtube.com/watch?v=MuKs9o1s8h8
- The Dirt on Decomposers https://www.youtube.com/watch?v=uB61rfeeAsM

Energy - The power needed for all living organisms to sustain life.

Ecosystem - A system of living things and their environment.

Biotic - Living organisms in an ecosystem such as the decomposers, producers and consumers listed below.

Abiotic - Non-living features in an ecosystem such as sunlight, water, and minerals in the soil.

Habitat - The natural home of an animal, plant, or other organism.

Food Chain: A model that shows how energy flows through living things in an ecosystem.

Food Web: A system of interconnected and interdependent food chains.

Decomposers: A living thing that breaks down the remains of other living things.

• Examples in the Garden: earth worms, mushrooms, bacteria

Producers: Plants! They use energy from the sun to produce food for themselves and for consumers.

• Examples in the Garden - all vegetables plants and weeds: arugula, beets, bind weed, broccoli, carrots, dandelions, collard greens, grass, green onions kale, lettuce, mustard greens, onions, peas, radishes, spinach, swiss chard, and many more!

Consumers: An organism that feeds on plants and/or animals for energy.

- Herbivores organisms that consume only plants
- Examples in the Garden caterpillar, rabbit, squirrel
- Omnivores organisms that consume plants and animals/insects
- Examples in the Garden birds
- Carnivores organisms that consume only other animals
- Examples in the Garden: snake, fox, spider

Active Engagement – Using the "Garden Food Chain Worksheet" have students go out to the schoolyard garden or have students think about their schoolyard garden and complete the worksheet using the instructions provided.

Link – As a human, you are a consumer because you eat food. Think about the different things you eat both from the garden and out of the garden. What different sources provide you energy? What part do humans play in the garden food chain?

SCHOOLYARD GARDENS

Garden Food Chain Worksheet

Take a minute to think about your schoolyard garden. Think about what grows there. What insects or animals you've observed. Think about what you may have found while digging a hole in the soil or what you found on a leaf when you harvested. With all of these thoughts in mind, follow the steps below to complete a garden food chain. The arrows represent the energy that is passed from one organism to the next. Notice the arrows makes a circle that leads back to the beginning role, decomposer. That is because all organisms in the garden depend on one another and are interconnected.

- 1. In the Decomposer box below, draw an example of a decomposer that lives in your schoolyard garden.
- 2. In the Producer box below, draw an example of a producer that grows in your schoolyard garden.
- 3. In the first Consumer box below draw an example of an herbivore that lives in your schoolyard garden.
- 4. In the second Consumer box below draw an example of an Omnivore or a Carnivore that lives in your schoolyard garden.



