

Lesson 4: Animals Live and Grow (2 Days)

Getting Started

? Questions to Explore

- How does the environment provide living things with what they need to live and grow?
- How do living things in an environment depend on one another?



Facts and Definitions

- Animals have basic needs for food (energy), air, water, and an environment in which to live.
- Animals depend on plants or other animals to provide them with energy.
- A **consumer** is an organism (living thing) that eats another organism.
- A living thing that is eaten by another organism is called an **energy source**.

⦿ Skills

- Summarize the needs of living organisms for energy and growth. (S)
- Summarize the basic needs of a variety of different animals (including air, water, and food) for energy and growth. (S)

✂ Materials

- | | |
|---|-------------------------|
| • <i>Crinkleroot's Guide to Knowing Animal Habitats</i>
by Jim Arnosky | • broccoli |
| • <i>Up in the Garden and Down in the Dirt</i> by Kate
Messner | • celery |
| • 2 carrots | • paper towel |
| • 2 spinach leaves | • scissors |
| | • sunflower seeds (kit) |

Introduction

Begin today's lesson by singing "The Habitat Song" your child learned at the end of the previous lesson.

Activities

Activity 1: Habitats of Living Things

In a previous lesson your child pointed out the plants and animals he recognized in the habitats found in *Crinkleroot's Guide to Knowing Animal Habits*. Today he will chart these living things.

To find the names of plants found in the habitat, go online and research "plants found in the _____" (wetlands, woodlands, grasslands, drylands). You can list plants found in the book or you can list the names of plants you find in your online research.

For Option 1, your child will draw the animals and plants and you can label them for him. For Option 2, your child can write the names of the living things he recognizes from the book. The habitats are listed in the order in which they are explored in the book. Most habitats have multiple pages that show a variety of wildlife for each one.

Option 1

On the "Habitats of Living Things" (Option 1) pages, your child can draw pictures of plants and animals found in the habitats, and you can label each one.

Option 2

On the "Habitats of Living Things" (Option 2) pages, your child can write the names of the living things he recognizes. Many animals are labeled in the book. You can shorten the names of some of the animals for the page. For example, instead of writing "water moccasin," your child can just write "snake," or instead of "great blue heron," your child can just write "heron."

Activity 2: Food for Energy and Survival

Ask your child to name the things animals need to live and grow (water, food, and shelter). Discuss how habitats provide all of these things for the organisms that live in them. An organism (living thing) that eats another organism is called a **consumer**. A living thing that is eaten by another organism is called an **energy source**.

Explain to your child that all living things need energy and that they get their energy from their food. Without food, organisms cannot function and will starve. Water is not enough to survive. Discuss that some animals eat plants, some eat other animals, and some eat both.

Look over the activity pages from Activity 1. Ask your child to analyze the living things he recorded for each habitat. Can he find one organism that provides food for another organism in the habitat?

Encourage him to find an example from each habitat of an organism that provides food for another organism in the habitat. Remind your child that the living thing that eats another organism is called the consumer, and the living thing that is eaten is the energy source. Your child can cut these out from his list and paste them on the "Food for Survival and Energy" activity pages. If he can't find a match on the previous activity pages, he can go back to the book and find an example or go online and draw or label the consumer and energy sources in the habitat boxes.

Activity 3: Shelter

Ask your child why shelter is important to an animal. Discuss how heat and Sun, as well as very cold conditions, can cause an animal to seek shelter. Shelter also helps animals protect themselves from predators. Ask your child to go through the *Crinkleroot's Guide to Knowing Animal Habitats* and look for examples of shelter. Ask your child if he can think of how animals use plants not just for food but also for shelter.

On the "Shelter" page, your child can cut out each animal and put it in the location that would provide the best shelter for the animal.

Day 2

Reading and Questions

Ask your child what he learned about how animals survive and grow in their environment. Ask your child what he thinks plants need in order to survive and grow (water, Sun, dirt, air, and space). Ask your child if plants need food. If he says they do, ask him how they get food since they don't have mouths and don't move a lot. Explain that plants make their own food, but in order to make food they need water, air,

Sun, and the right soil.

Read *Up in the Garden and Down in the Dirt* aloud to your child. The book is long, so you may want to read the first half and discuss the first three questions. Then take a short break, finish the book, and ask the remaining questions.

1. What season is it on the first page in the book. How do you know?

It's winter. There is snow on the ground, all the plants are dead, and the people are wearing coats and hats.

2. What did the people have to wait for before they could plant their seeds? Why?

They had to wait for the dirt to dry out and warm up. The seeds will grow best in the spring when things are starting to warm up.

3. Why does Nana tell the boy to give the plants a drink?

Because the plants need water in order to grow.

4. What is "Nana's rain"?

The garden hose she is spraying.

5. Why does the author say "Hurry, hurry, and harvest!"?

Because it is getting cold and the plants will die when it gets too cold. Also, the fruits and vegetables will rot if they are not harvested fast enough.

6. Would you enjoy planting a garden? Why or why not?

Answers will vary.

7. In the book, how do the animals help the plants in the garden? Hint: Read about the animals at the back of the book.

The honeybees pollinate the plants, the worms stir up the soil, skunks eat the cutworms, the robin eats bugs that can damage plants, snakes eat grasshoppers that can damage plants.

Activity 4: Plant Art

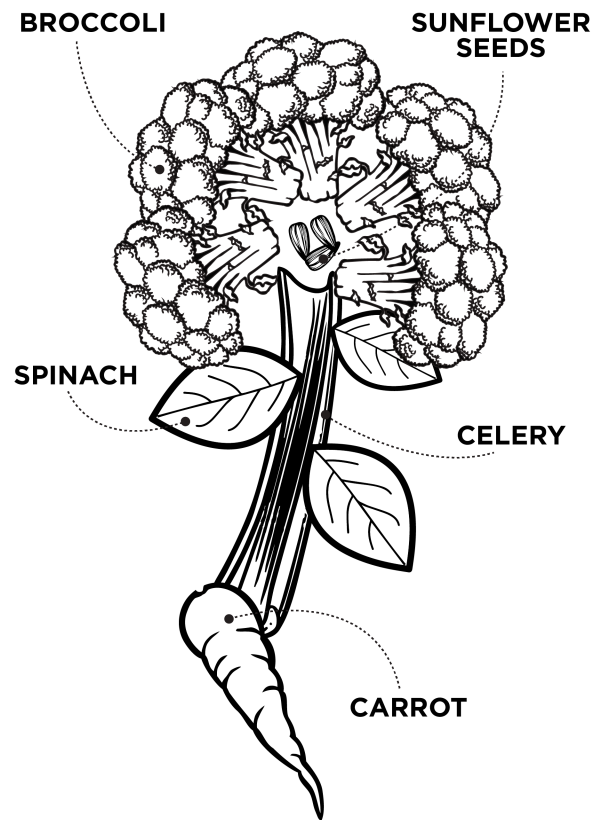
Ask your child if he can name the parts of a plant. Discuss that plants have leaves, stems, roots, seeds, and flowers. (Show your child a picture of a flowering plant if needed.) Explain that animals may eat one part of a plant or multiple parts of a plant.

Put the following plant parts on the table: broccoli florets, celery, two carrots (preferably with the green tops cut off), sunflower seeds, and two spinach leaves. Ask your child what all of these plants have in common. You can eat them!

Ask your child to hand you the plant that is a seed (sunflower seeds), the leaf (spinach), root (carrot), flower (broccoli florets), and the stem (celery).

Lay a paper towel in front of him and ask him to make a plant by arranging the foods according to what part of the plant they are. Give him some time to experiment with different designs. The celery will be the stem, the spinach the leaves, the carrots will be the roots beneath the stem, the broccoli will be the flower on top of the stem, and the seeds can go in the middle of the broccoli florets.

Plant Art



Activity 5: Plants Can...

For this creative thinking activity, your student will think of everything plants can..., plants are..., and plants have.... On the "Plants" page, ask your child to finish the first statement with as many ideas as he can think of.

Plants can...

Repeat with the next two statements:

Plants are...

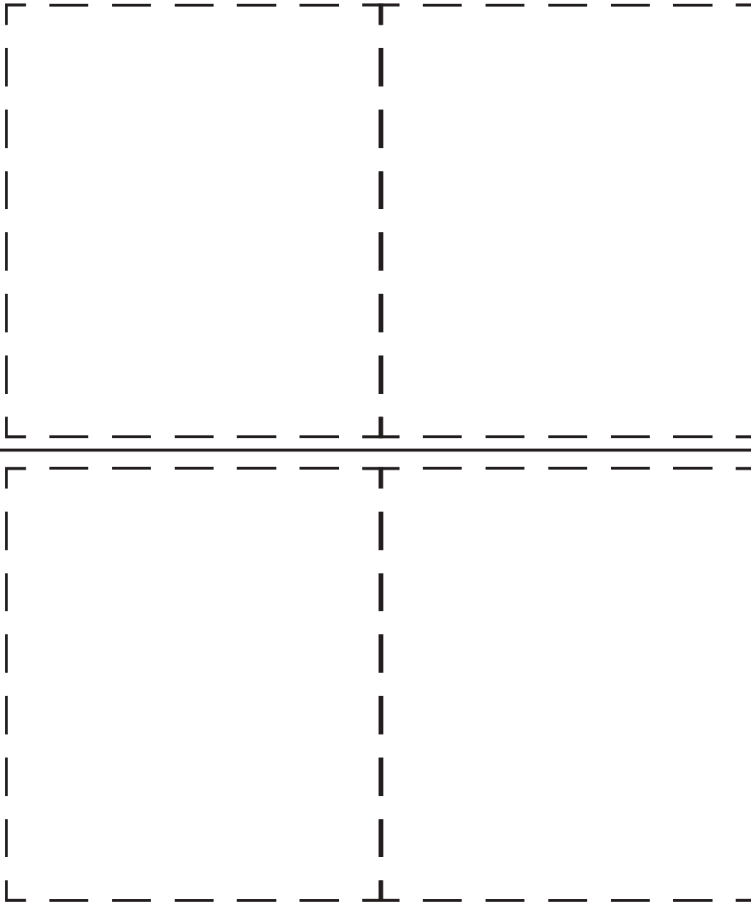
Plants have...

Record your child's answers. Encourage him to think about everything he has learned about plants in this lesson. He can look through his books and his activity pages to get ideas.

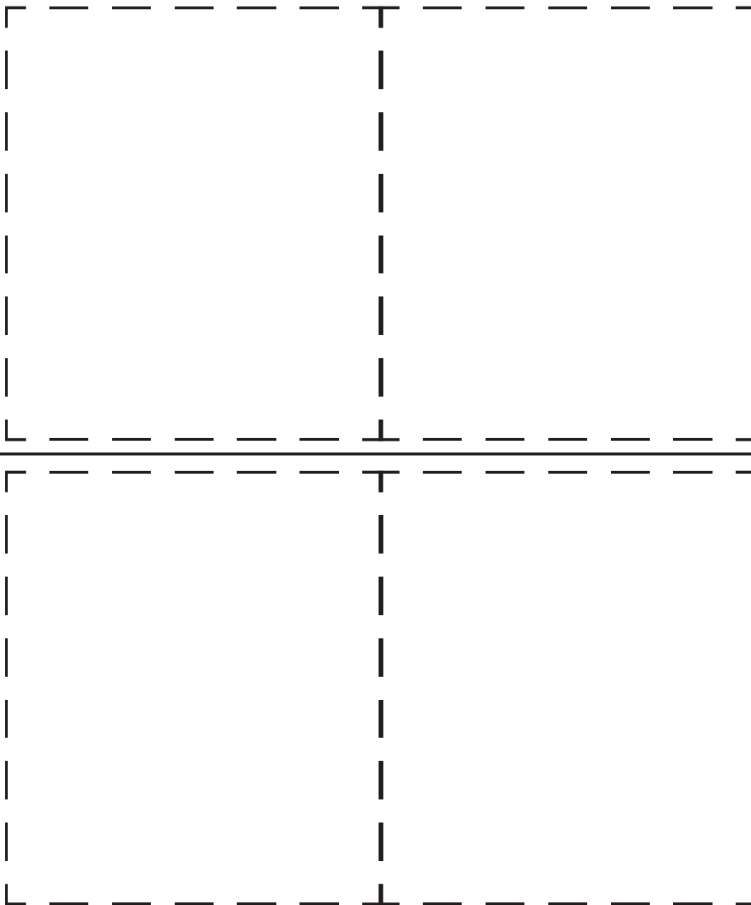
Wrapping Up

In this lesson, your child learned about what living things need in order to survive and grow. Ask him to tell you what animals need in their environments and what plants need. Ask him how animals depend on plants (food and shelter) and how animals can help plants.

ANIMALS



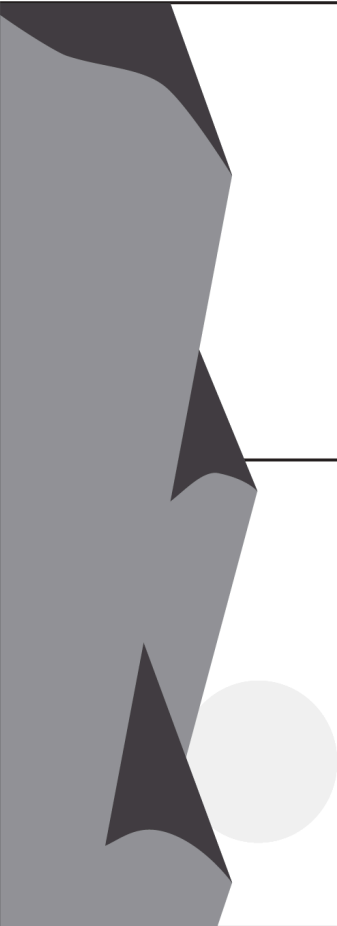
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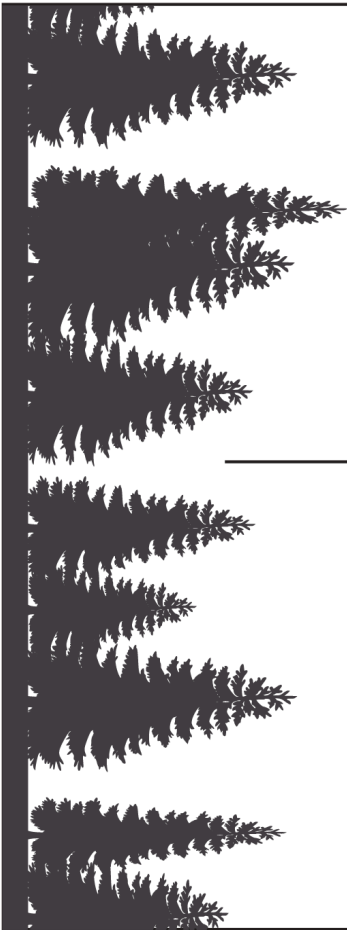


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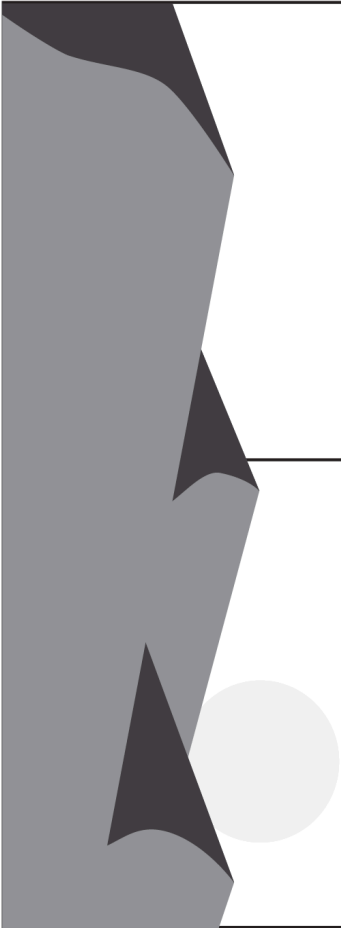
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ANIMALS

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WETLANDS	
PLANTS	ANIMALS
	
WOODLANDS	
PLANTS	ANIMALS
	

GRASSLANDS	
PLANTS	ANIMALS
	

DRYLANDS	
PLANTS	ANIMALS
	

FOOD FOR SURVIVAL AND ENERGY

Directions: Paste an example of an organism that provides food for another organism in each habitat explored in the book.

WETLANDS

CONSUMER

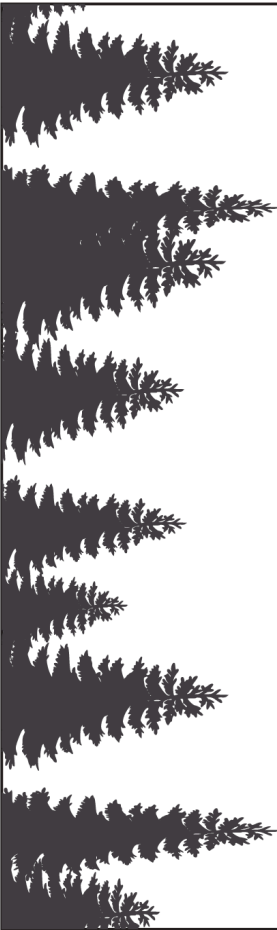
ENERGY SOURCE



WOODLANDS

CONSUMER

ENERGY SOURCE



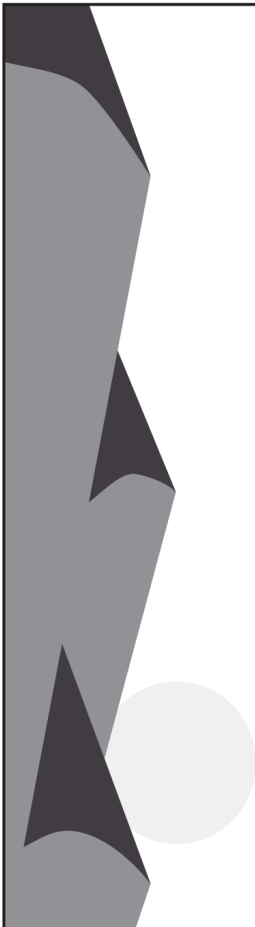
GRASSLANDS
CONSUMER

ENERGY SOURCE



DRYLANDS
CONSUMER

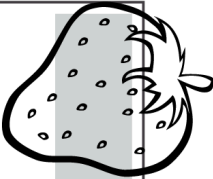
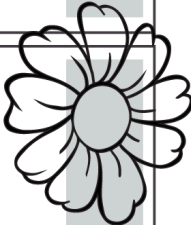
ENERGY SOURCE



SHELTER

Directions: Match each animal with the best shelter.



	 CAN
	 HAVE
	 ARE

PLANTS