

Importance of Ecosystems

OBJECTIVE

- Explain what an ecosystem is
- Understand the definition of an animal species
- Describe how different ecosystems depend on each other

CLASS TIME

60 minutes

MATERIALS

- Internet access, encyclopedias or other research materials (*suggested links provided below*)
- Pens, pencils, colored pencils, crayons or markers
- Importance of Ecosystems Worksheet (*included*)

Procedure

1. Before getting started, ask students, **“What is an ecosystem?”** Some answers might include: Living things, the environment, animals working together. Explain that ecosystems are made up of both living and nonliving things. For example, a dead tree might not be alive anymore, but it can still hold nests for birds who are alive.
2. Next, ask students, **“What do the nonliving parts of an ecosystem do?”** Some answers might include: water is available for plants and animals to drink, rocks provide shelter, soil allows plants to grow.
3. Then, ask students, **“What types of animal species are in the ecosystem?”** Some answers might include: fish, deer, coyotes, birds.
4. Once all students have shared their answers, divide the class into pairs or small groups. Assign each group an ecosystem that is relevant to your local area, such as a beach, park, forest, wetland, or prairie. Have students use reliable resources, such as the suggested links, to research their assigned ecosystem and complete the Importance of Ecosystems Worksheet.
5. Bring the class together and give each group a few minutes to present what they learned about their ecosystem. Then, using the Critical Thinking Questions as a guide, discuss each ecosystem and cross off the questions that students can now answer.

Links

1 <https://kids.britannica.com/students/article/ecosystem/384948>

2 <https://education.nationalgeographic.org/resource/ecosystem/>

3 <https://www.eurokidsindia.com/blog/what-is-an-ecosystem-types-of-ecosystems.php>

CRITICAL THINKING QUESTIONS

1. How many different species of plants are in your ecosystem? How many different species of animals? What are three different ways one plant or animal relates to another plant or animal in you ecosystem?

Possible answers:

- Rabbits eat plants.
- Birds eat seeds.
- Coyotes eat the rabbits.

2. How are ecosystems similar to each other? How are they different?

Possible answers:

- All ecosystems have animals and plants.
- Most ecosystems have water, rocks and soil.
- Some ecosystems are filled with water, and some are filled with air.
- The kinds of plants and animals that live in each ecosystem are very different!

3. Are ecosystems related to each other the way animals and plants are? How does that work?

Possible answers:

- Birds in the forest can fly to other ecosystems.
- Water in the ocean gets evaporated and rains on land.
- The river carries things out to the ocean.

STUDENT WORKSHEET

Importance of Ecosystems

Name _____

Now you get to learn more about your ecosystem! Use the tools available to you to research your ecosystem. Organize your notes below.

My ecosystem is:	
The nonliving parts of my ecosystem are:	
The plants in my ecosystem are:	
The animals in my ecosystem are:	
Fun facts about my ecosystem are:	

How many different plant species live in your ecosystem? _____

How many different animal species live in your ecosystem? _____

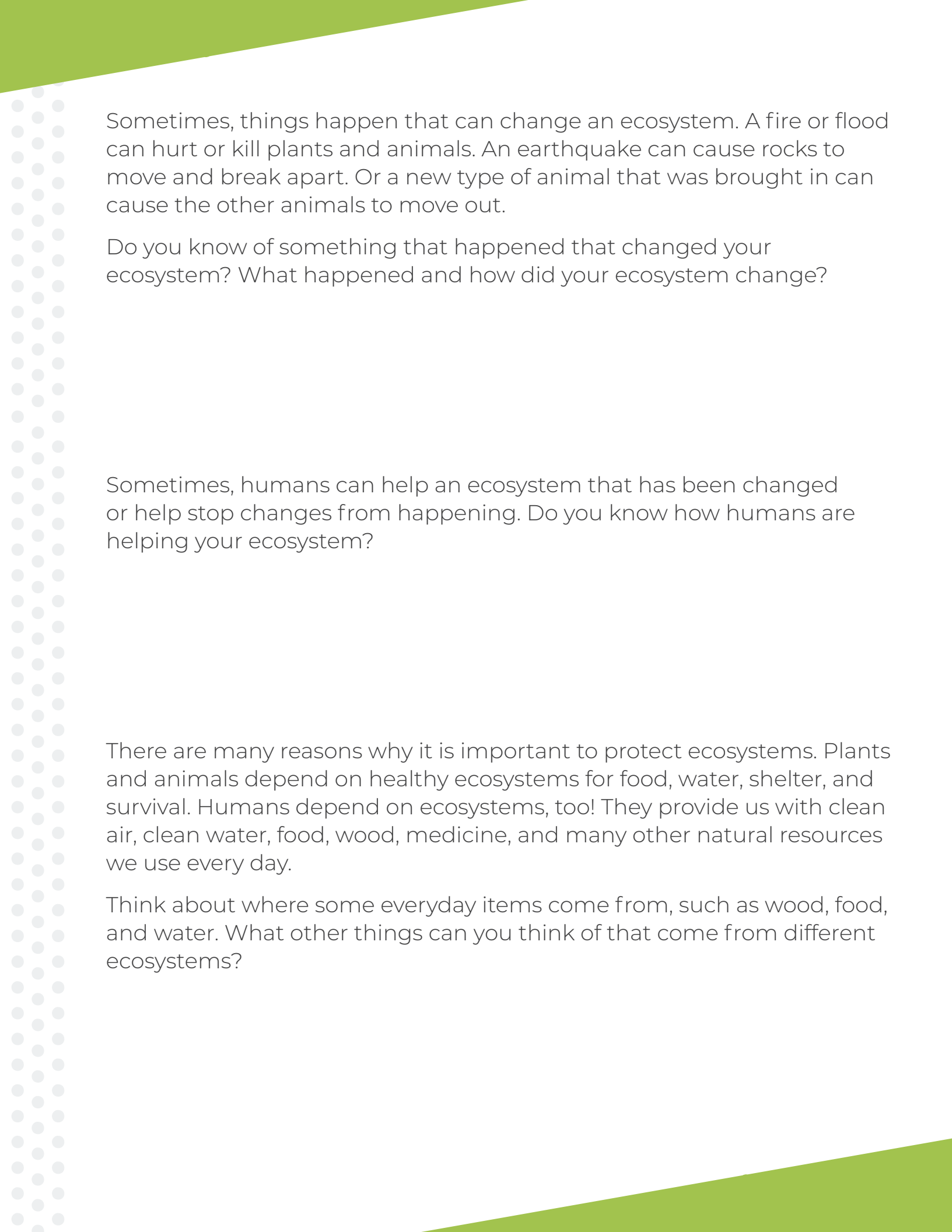
How do the plant and animal species rely on each other to live?

How do the plants and animals rely on the nonliving parts of the ecosystem?

All ecosystems are important! Why is your ecosystem important?

Now, draw a picture of your ecosystem. Include at least three plants, three animals and one nonliving thing.





Sometimes, things happen that can change an ecosystem. A fire or flood can hurt or kill plants and animals. An earthquake can cause rocks to move and break apart. Or a new type of animal that was brought in can cause the other animals to move out.

Do you know of something that happened that changed your ecosystem? What happened and how did your ecosystem change?

Sometimes, humans can help an ecosystem that has been changed or help stop changes from happening. Do you know how humans are helping your ecosystem?

There are many reasons why it is important to protect ecosystems. Plants and animals depend on healthy ecosystems for food, water, shelter, and survival. Humans depend on ecosystems, too! They provide us with clean air, clean water, food, wood, medicine, and many other natural resources we use every day.

Think about where some everyday items come from, such as wood, food, and water. What other things can you think of that come from different ecosystems?

Think about what you like to do when you visit certain ecosystems, such as hike, swim or camp. What are some things you can do in your ecosystem?

Ecosystems and all the different plant and animal species that live there are very important and we should take care of them as much as possible. If something happens to one ecosystem, it can affect another one, and then another and another, and so on.

How many different ways can you think of to help your ecosystem?
Pick one way that you can help, and draw of picture of it here.

