



LAURITZEN
GARDENS

*Discovery Tour
Student Packet*

8th Grade

Name: _____



Forest Ecosystem



An **ecosystem** is defined as any community of living and non-living things that work together. Ecosystems do not have clear boundaries, and it may be difficult to see where one ecosystem ends and another begins. In order to understand what makes each ecosystem unique, we need to look at the biotic and abiotic factors within them. **Biotic factors** are all of the living organisms within an ecosystem. These may be plants, animals, fungi, and any other living things. **Abiotic factors** are all of the non-living things in an ecosystem.

Both biotic and abiotic factors are related to each other in an ecosystem, and if one factor is changed or removed, it can affect the entire ecosystem. Abiotic factors are especially important because they directly affect how organisms survive.

<http://study.com/academy/lesson/abiotic-factors-of-an-ecosystem-definition-examples-quiz.html>

Can you identify the factors of a forest habitat?

Biotic

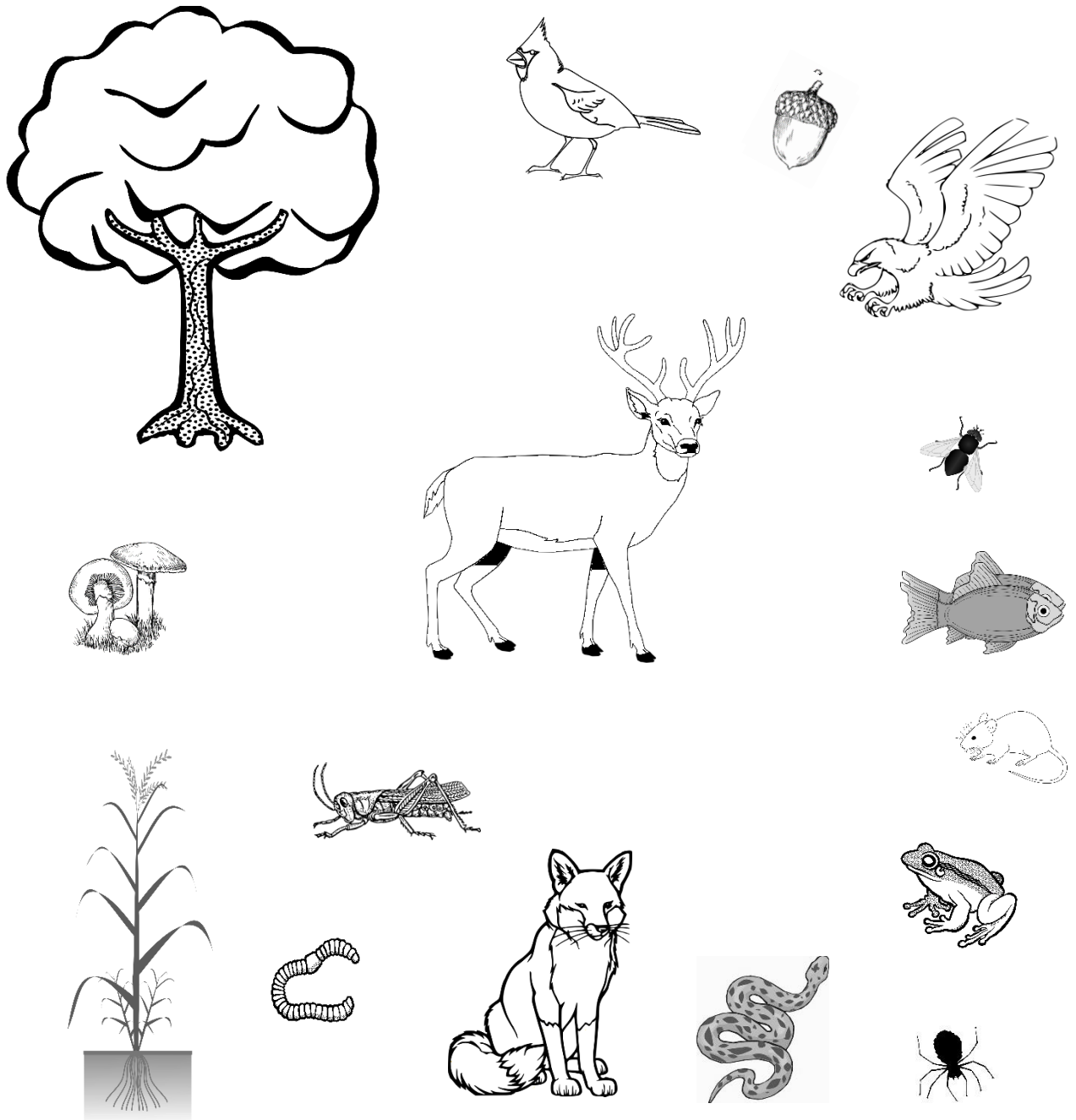
Abiotic



Food Webs

All living things need energy to survive. Plants get energy from photosynthesis. Humans and animals get energy from the things they eat (plants and animals).

A **food web** is a diagram showing which animals eat which other animals in a given ecological community. It also aims to show the transfer or flow of energy and materials, such as sunlight or carbon, which occurs between species via their feeding relationships. Below are typical plants and animals that you might find in a garden environment. Can you draw connections between the plants and animals to demonstrate a garden food web?





Plant Adaptations

Plants adapt (change) to their habitat in order to get sunlight, water, carbon dioxide and nutrients. Plants also need to their environment in order to protect themselves and reproduce.

Look around you and find a plant or tree that interests you. Describe it below or draw a picture, noting characteristics that you know exist but may not be able to see (roots, flowers, etc.)

Describe or draw your plant here:

Identify characteristics or adaptations of your plant that help do the following things to survive:

Obtain sunlight:

Obtain water:

Filter carbon dioxide and nutrients:

Protect itself:

Reproduce: