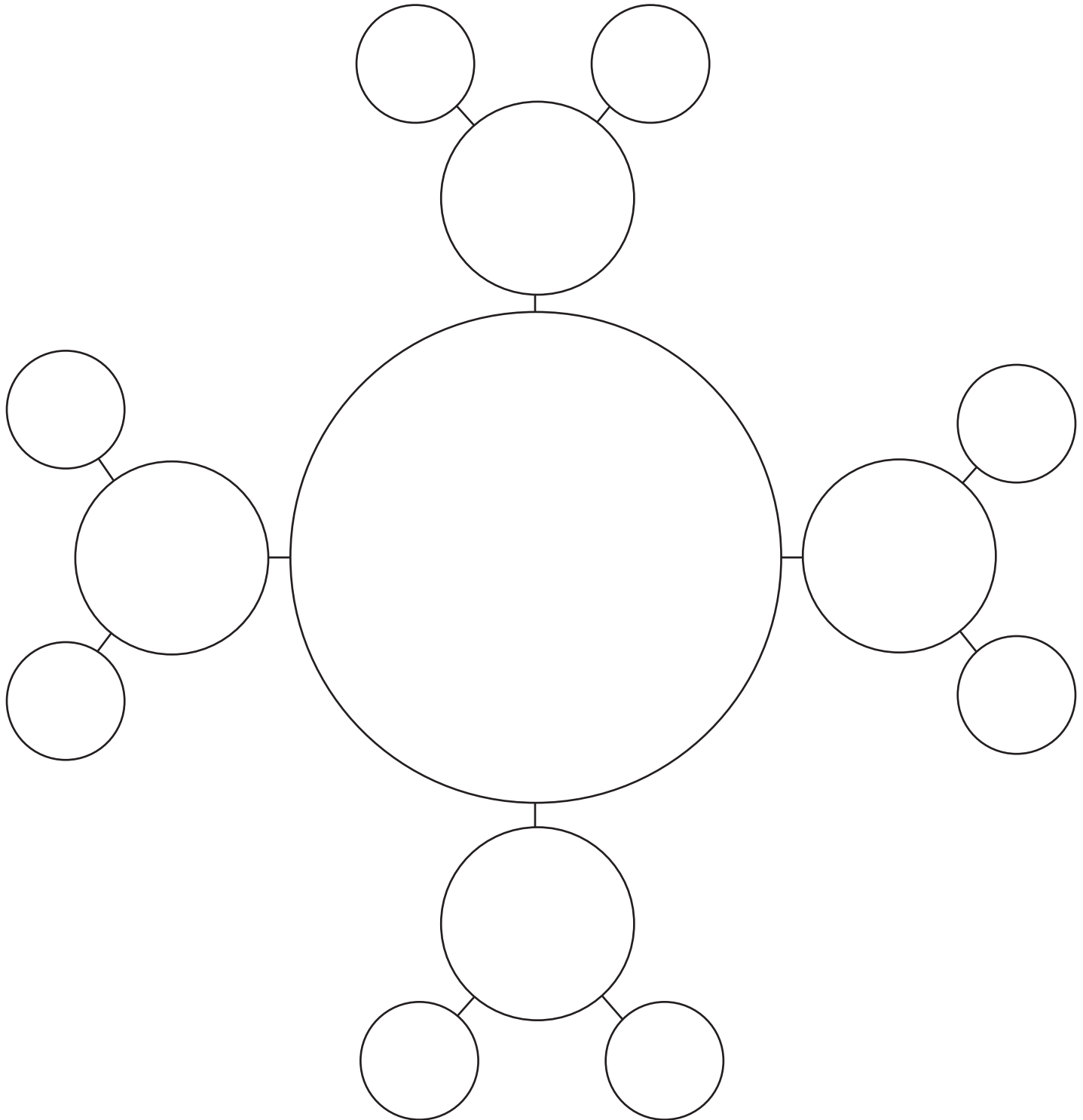


Name \_\_\_\_\_

Date \_\_\_\_\_

## Cluster Notes Guide

**Directions:** Write the main topic of the chapter in the center circle. Write subtopics in the circles around the main topic. Use the outer circles for facts and details that support each subtopic. (Add or cross out circles as needed to organize key information in the chapter.)



## Living Things and Their Environments: Content Assessment

**Directions:** Use what you have learned about living things and their environments to answer the following questions.

### Chapter 1

1. All living things on Earth make up the \_\_\_\_\_.

2. Give two examples of biotic and two examples of abiotic factors in a meadow ecosystem.

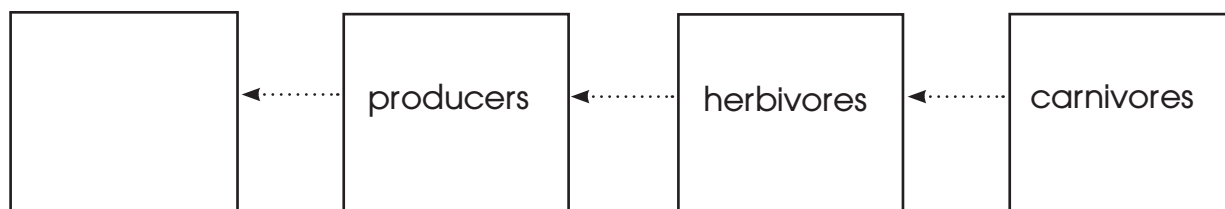
3. In the past few decades, scientists have discovered a set of very unusual ocean ecosystems around hot, volcanic vents in the seafloor. These ecosystems are too deep underwater to rely on energy from the sun; instead, they rely on energy from breaking down certain chemicals emitted by the vents. Special bacteria and other tiny organisms have the “job” of capturing this energy and serving as a food source for the other organisms in the ecosystem.

Given this information, which organisms occupy the niche most similar to these bacteria on land?

### Chapter 2

4. Herbivores, carnivores, and omnivores are types of \_\_\_\_\_.

5. What part is missing from the food chain below?



6. Many plants depend upon honeybees for pollination. In recent years, the number of bees has sharply declined in many areas. How might the decline of bees in a certain area affect an animal that eats only meat and does not eat bees or honey?

Name \_\_\_\_\_

Date \_\_\_\_\_

### **Chapters 3 and 4**

7. The four chemicals necessary for all living things are \_\_\_\_\_.
8. Imagine that a fire destroyed a large section of forest. What might be one short-term change and one long-term ecosystem change linked to this event?
9. It is well known that some places (for example, rain forests) have a greater number of species than other places. What are some possible reasons this might be the case?
10. In each portion of the circle below, write an event that could cause an ecosystem to change. Then explain how each effect can cause further change.

