Succession: Equilibrium in Ecosystems

◆ Understanding Main Ideas

Answer the following questions on a separate sheet of paper.

1. What organisms are usually the pioneer species in a new area? How do these organisms prepare the area for other species? **LICHENS, MOSSES, GRASSES, THEY GOT BIGGER, MORE COMPLEX AND MORE MATURE**

2. The illustration below shows succession in an abandoned field. How did the plant populations in the community change over time? **SECONDARY SUCCESSION**

◆ Building Vocabulary

Identify each of the following as an example of primary succession or secondary succession. Write your answers in the spaces provided.

3. An old house was torn down. Small weeds and grasses grew in the vacant lot. Over the next few years, bushes and tree seedlings began to grow. **SECONDARY SUCCESSION**

4. An undersea volcano erupted and formed a small island. Mosses and lichens began to grow on the bare volcanic rock. **PRIMARY SUCCESSION**

5. A logging company cut down all the large spruce trees in an area of forest. After the area was cleared, spruce seedlings began to sprout. Rabbits, birds, and deer returned to the area. **SECONDARY SUCCESSION**
From Pond to Forest

You have learned that over many years, the process of succession can transform an abandoned field into a forest. Succession can also transform a pond into a forest. How can an aquatic ecosystem change into a land ecosystem? Examine the sequence of changes shown in the figures below.

Answer the following questions on a separate sheet of paper.

1. What type of succession is shown in this example? Explain your answer. **SECONDARY: SOIL IS PRESENT**
2. Name three pond populations that could not survive in a forest ecosystem. **FISH, TURTLE, AQUATIC PLANTS**
3. Name three forest populations that could not survive in a pond ecosystem. **DEER, RABITS, TREES**
4. Describe how the ecosystem changed from Figure 1 to Figure 4. **POND GOT COVERED WITH SOIL, AQUATIC LIFE GOT REPLACED BY TERRESTRIAL LIFE, LARGER PLANTS AND ANIMALS MOVED IN.**