Lesson: Cycles in Nature

Grade: K-3
Subject: Science, Math (extension)
Objectives:
Students will:

- recognize cycles in nature
- evaluate the usefulness of natural cycles

Teaching Time: 45 minutes

Materials: transparency, Cycles; worksheets, What's A (Tree) Cycle? and The Water Cycle

Background:

Cycles are a part of life. A cycle may go through changes, yet the changes eventually arrives back to where the cycle began. Cycles ensure that life can go through many changes, yet maintain its stability. In order to understand the concept of recycling, students must first understand cycles and their role in nature.

Procedure:

- **What does "cycle" mean? What other words include the word "cycle?"** (Most students will know bicycle or tricycle.) Point out that the "cycle" part of bicycle is the wheel, and that it goes around and around. Explain that cycles are an important aspect of life on earth, and that for something to be a cycle, it must always arrive back at the point of origin.
- Use the transparency Cycles or draw some simple cycles on the blackboard. Show how you can name all the many phases of a cycle: day-night, spring-summer-fall-winter, days of the weeks, months of the year.
- Give each student the worksheet, What's A Tree Cycle? and What's a Water Cycle to color, cut, and paste.
- Discuss the tree cycle and how the cycle provides for the continued life or survival of trees. Also, the water cycle makes it possible for all forms of life to continue on the earth.
- With older students, explain that cycles are important to our everyday lives. Have students draw a cycle of their typical day and week.
- **What would happen if every day or every week were completely different? What if there were no repeating patterns in our lives? Would you accomplish as much if you had to re-decide regular habits like brushing teeth, tying shoes, etc., every day?**
- **What if someone gathered up all the seeds and didn't let them get planted back in the ground?** If you've read The Lorax (See "Needs and Wants"), discuss how the cycle was broken in the story.

Reflection/Response:

- Have students describe, illustrate, or act out a natural cycle.
- For a homework assignment, ask students to find an example of a cycle at their home that they draw or write down to share with the class.

Extension:

- Create a classroom or school bulletin board using student artwork about cycles. See the Natural Resource Bulletin Board example in the Resource section.
- Have students write out the number of steps involved in each cycle they have discussed or identified.
- Assign the Activity: Environmental Fortune Teller in the Resource section.

Common Curriculum Goal:

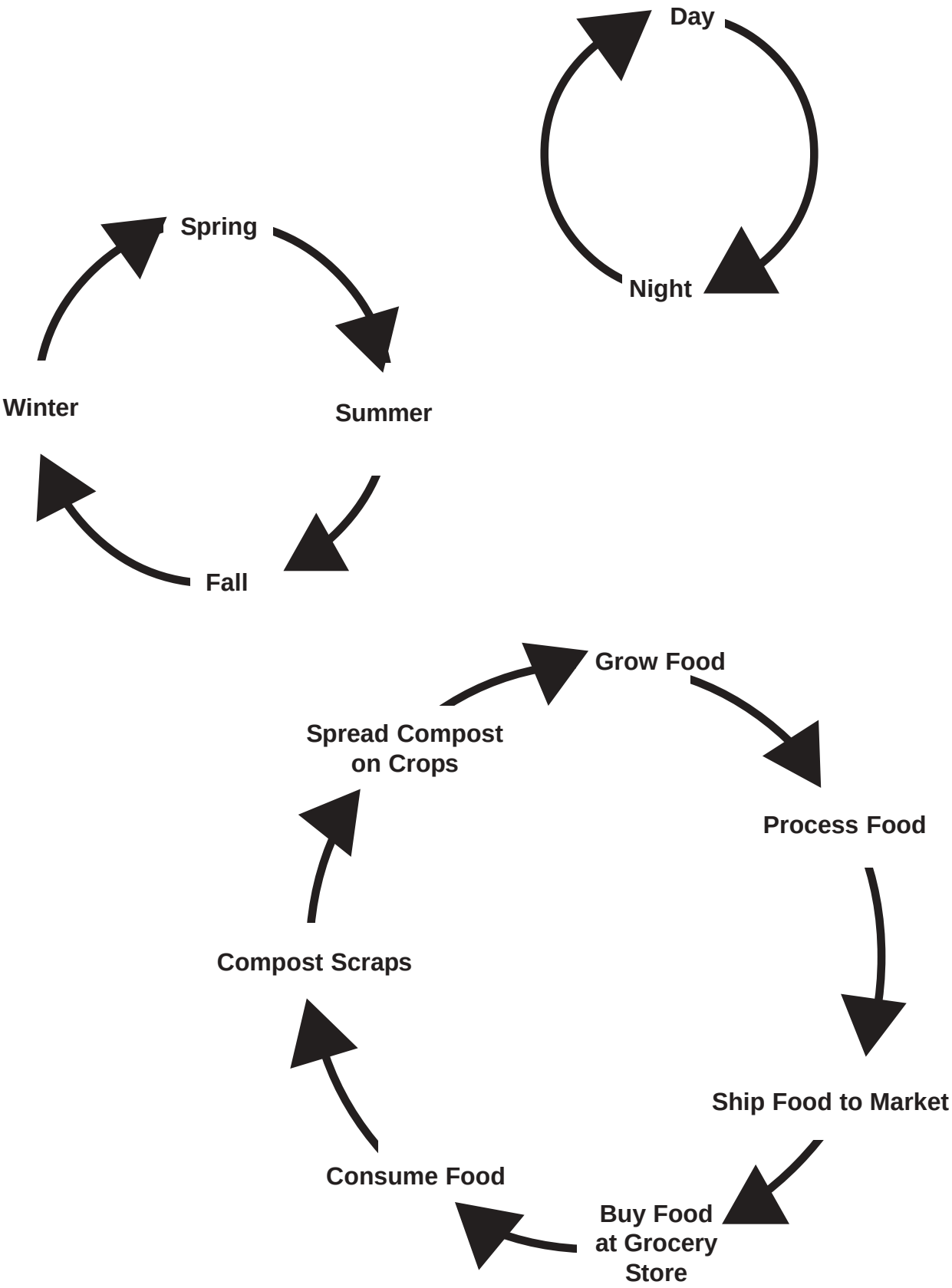
Science: Unifying Concepts and Processes

- Apply foundation concepts of change, cycle, cause and effect, energy and matter, evolution, perception, and fundamental entities.

Grade 3 Benchmark:

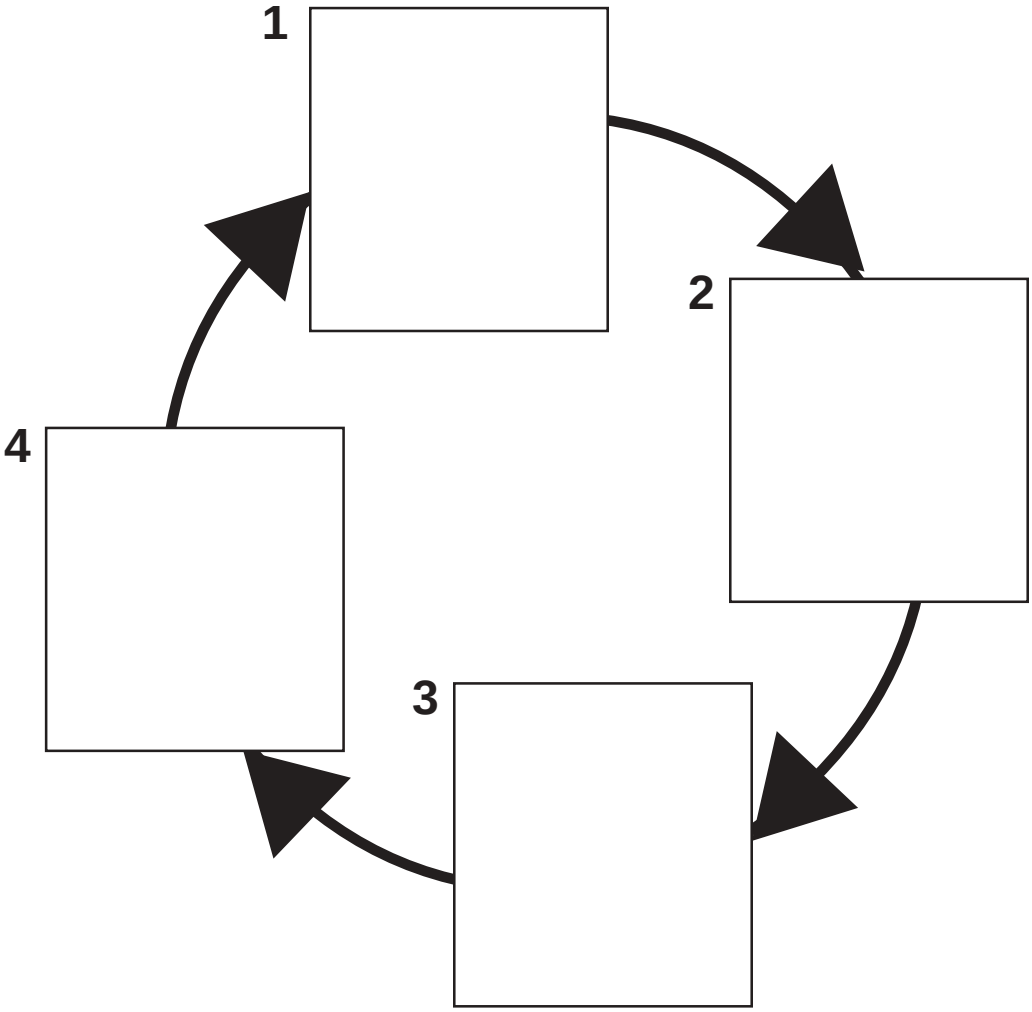
- Identify examples of change.
- Arrange parts of a cycle.

Overhead: Cycles

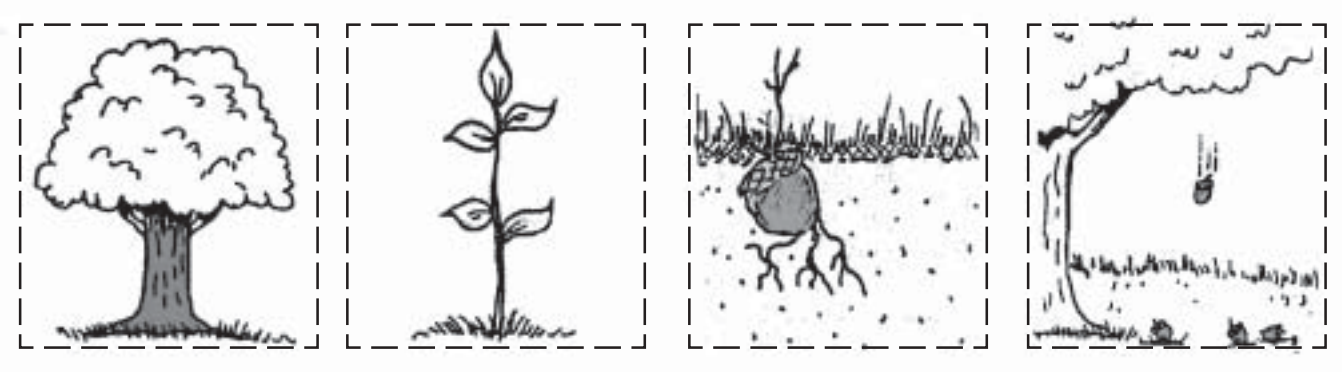


Worksheet: What's A Tree Cycle?

Student Name:_____



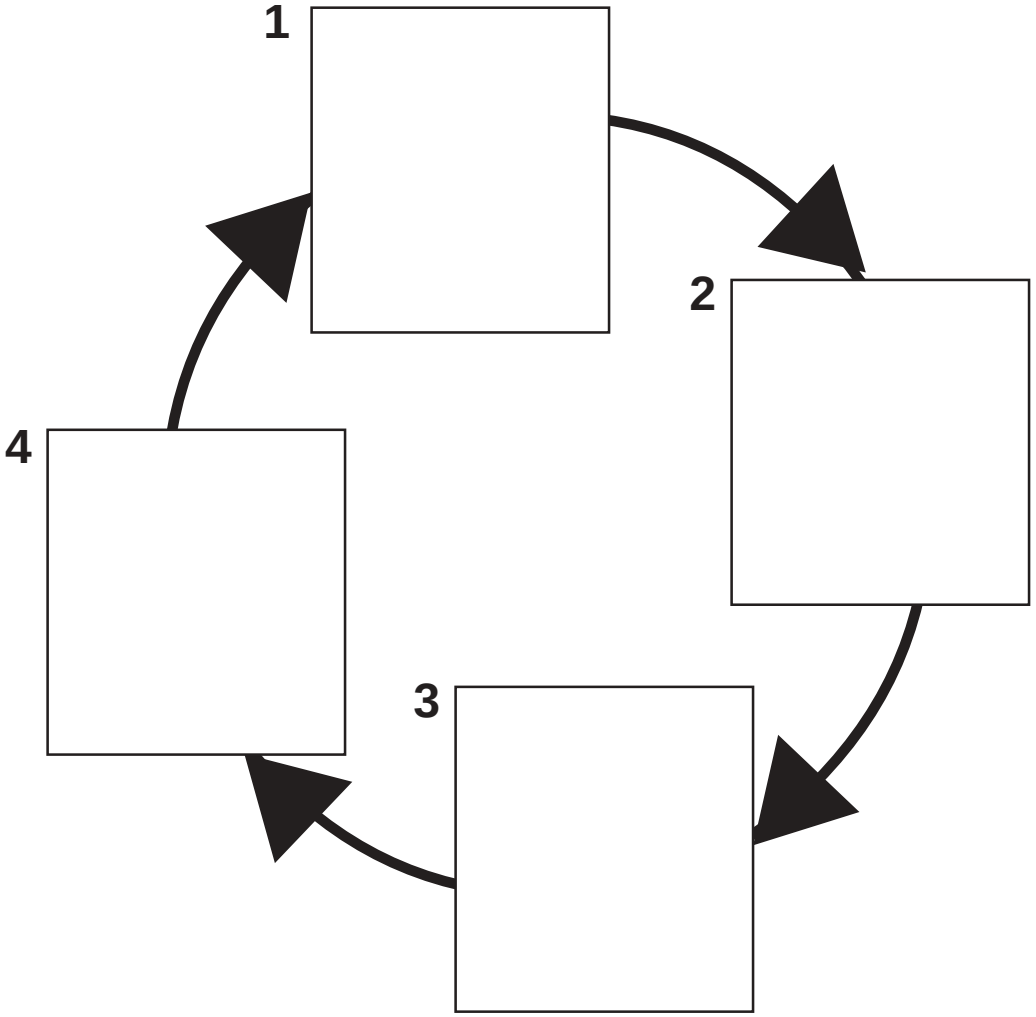
Cut, color, and paste the pictures into the correct order to show the cycle of a tree.



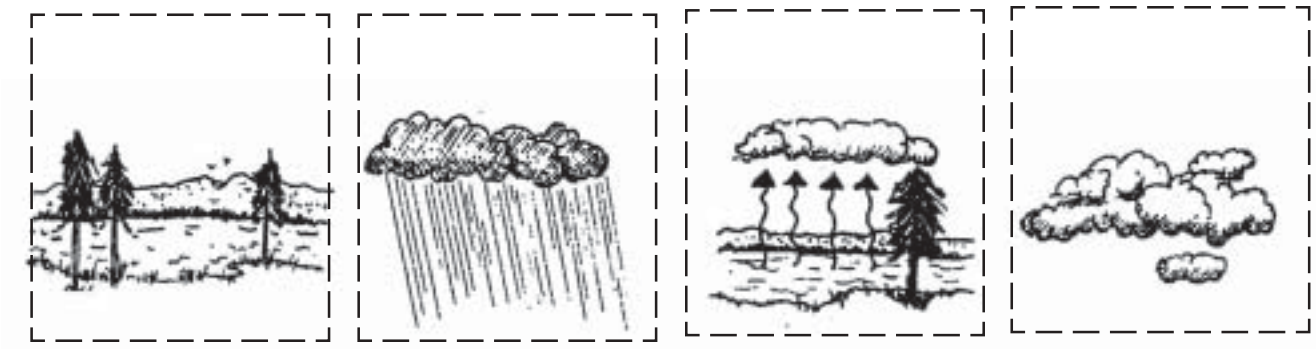
South Carolina Department of Health and Environmental Control: *Action for a Cleaner Tomorrow* (1996)

Worksheet: What's A Water Cycle?

Student Name:_____



Cut, color, and paste the pictures into the correct order to show the cycle of water.



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