

Teaching First Step Nonfiction

Discovering Nature's Cycles



K-2nd Grade Interest Level
1st Grade Reading Level

Titles in this series:

Day and Night

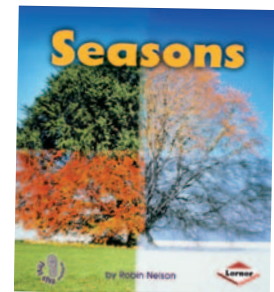
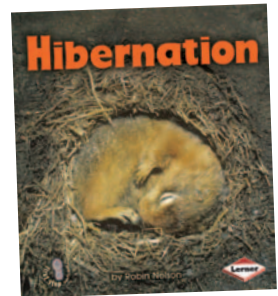
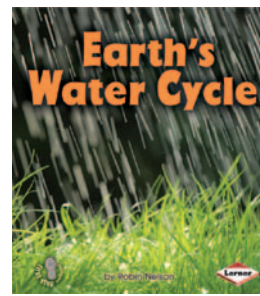
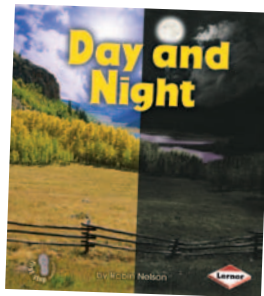
Earth's Water Cycle

Hibernation

Migration

The Night Sky

Seasons



Standards

Science

- Understands atmospheric processes and the water cycle
- Understands the composition and the structure of the universe and Earth's place in it
- Understands relationships among organisms and their physical environment
- Understands biological evolution and the diversity of life

Reading

- Uses the general skills and strategies of the reading process
- Uses reading skills and strategies to understand and interpret a variety of informational texts

Writing

- Uses the general skills and strategies of the writing process

Thinking and Reasoning

- Applies decision-making techniques

Multiple Intelligences Utilized

Verbal-linguistic, logical-mathematical, intrapersonal, interpersonal, visual-spatial

Assessment Cycles

Purpose

Students will demonstrate their understanding of nature's cycles.

Materials

- Discovering Nature's Cycles series
- Nature's Cycles p. 6
- pencils

Prepare

- Make two copies of Nature's Cycles p. 6 for each student.

Pretest

- Have students answer the questions on Nature's Cycles p. 6 before beginning the Discovering Nature's Cycles series.
- Collect and correct the papers, but do not record the scores.
- Retain papers until the end of the unit.

Read

- Read the Discovering Nature's Cycles series when directed in the teaching guide.

Model

- Follow the lesson plans to effectively utilize the Discovering Nature's Cycles series.

Practice

- Have students answer the questions on Nature's Cycles p. 6.

Discuss

- What were your favorite activities from this unit?
- What was the most interesting fact you learned during the unit?

Evaluate

- To evaluate reading comprehension, students answer the questions on Nature's Cycles p. 6 after reading the Discovering Nature's Cycles series. Tell students that they may recognize the questions, but their answers may have changed after reading the books. Compare their answers to the pretest to see improvement.
- To assess student understanding of the unit, evaluate after completing the lessons in the Discovering Nature's Cycles teaching guide.

Lesson 1

"The Cycle Song"

Purpose

Students will identify important natural cycles.

Materials

- Discovering Nature's Cycles series
- projection (transparency or computer) of song lyrics
- overhead projector (or computer)
- whiteboard
- marker
- paper
- pencils

Prepare

- Create a copy of the lyrics to "The Cycle Song" that is big enough to share with the class. (Some ideas include using an overhead transparency, project on a whiteboard, or copy on a

large poster.)

Pretest

- When have you heard the word *cycle*? What does the word *cycle* mean?

Read

- Read Discovering Nature's Cycles series.

Discuss

- What is a natural cycle?
- Brainstorm other natural cycles that were not included in the Discovering Nature's Cycles series. Write the ideas on the whiteboard.

Model

- Display the lyrics to "The Cycle Song" for the class.
- Sing "The Cycle Song" with the students.

Practice

- As a whole group or individually, write additional verses to the song based on the earlier brainstorming.

Evaluate

- Observe student participation.

The Cycle Song

Tune "The Wheels on the Bus"

Cycles in nature move round and round,
Round and round, round and round.
Cycles in nature move round and round.
They are important to us.

Some animals will hibernate,
Hibernate, hibernate.
Some animals will hibernate.
They sleep all winter long.

There are four seasons in a year,
In a year, in a year.
There are four seasons in a year.
Winter, spring, summer, and fall.

As Earth spins, we have day and night,
Day and night, day and night.
As Earth spins, we have day and night.
We see the sun and the moon.

Many animals move far away,
Far away, far away.
Many animals move far away.
They migrate to survive.

Water in the air comes down as rain,
Down as rain, down as rain.
Water in the air comes down as rain.
Then it evaporates.

Lesson 2 Time for Cycles

Purpose

Students will choose the appropriate measurement of time for natural cycles.

Materials

- Discovering Nature's Cycles series
- whiteboard
- marker
- paper
- pencils

Prepare

- Research durations of the cycles presented in Discovering Nature's Cycles.

Pretest

- What are the different ways we measure time?

Read

- Read Discovering Nature's Cycles series.

Model

- Discuss events that can be completed in a minute, an hour, a day, a week, a month, and a year.
- On the board, create six columns. Use the time measurements as headings.
- Give directions for finding the duration of cycles. Tell students that some cycles could fit in more than one column.

Practice

- In pairs, have students find time measurements in the Discovering Nature's Cycles series.
- Record the student information on the board.

Discuss

- Discuss the cycles that are placed in more than one column.
- Compare the duration of the different cycles.
- Think of cycles not presented in the Discovering Nature's Cycles series. How long do these cycles last?

Evaluate

- Observe student participation during the activities.

Lesson 3 Cycle Sequence

Purpose

Students will arrange the stages of cycles in sequence.

Materials

- Natural Cycles p. 7
- Discovering Nature's Cycles series
- construction paper
- scissors
- glue

Prepare

- Copy Natural Cycles p. 7 for each student.

Pretest

- What does *sequence* mean?

Read

- Read Discovering Nature's Cycles series.

Model

- What are the steps to make a peanut butter and jelly sandwich?
- What would happen if we put the pieces of bread together before we put on the peanut butter?
- What are cycles? Do they have a sequence?
- Explain the directions for the Natural Cycles project.

Practice

- Complete Natural Cycles p. 7.

Discuss

- How is a cycle different from the steps to make a peanut butter and jelly sandwich?
- How could we show the migration or hibernation cycle?

Evaluate

- Evaluate the Natural Cycles project for completeness and accuracy.

Lesson 4

My Cycles

Purpose

Students will identify cycles in the human body.

Materials

- Discovering Nature's Cycles series
- Cycle Template p. 8
- whiteboard
- marker
- pencils
- colored pencils

Prepare

- Make two copies of the Cycle Template p. 8 for each student.

Pretest

- What does your body do without you having to think about it?

Read

- Read books from the Discovering Nature's Cycles series.

Discuss

- What are cycles?

- What are some cycles that happen in your body?

Model

- With the students, brainstorm a list of cycles that happen in the human body, such as sleep, circulation, respiration, growing hair and nails, getting teeth, etc.
- Choose a cycle, and demonstrate how to break the cycle into five steps.
- Write the name of the cycle in the small circle in the center of Cycle Template p. 8.
- Write in the steps of the cycle in the small spaces around the edge of the circle.
- Draw a picture of each step in the larger spaces.

Practice

- Depending on student ability, independently or as a whole

group choose two cycles and complete the Cycle Template p. 8 for each.

Discuss

- Share their cycles with the class.

Evaluate

- Evaluate student projects for completeness and quality of work.

Extension

- Trace students' bodies onto large pieces of butcher paper.
- Draw in details for the student outline.
- Attach the body cycles near the area of the body where it occurs.
- Display the bodies with their cycles along a wall.

Name _____

Nature's Cycles

Directions: Fill in the blanks.

1. A cycle is a _____ that happens over and over again.
2. Some animals _____ to find food or to have young.
3. _____, _____,
_____, and _____ are the four seasons.
4. It is hard for animals to find _____ when snow covers the ground. Some animals _____ to survive the winter.
5. Earth _____ in space. When our part of Earth faces the sun, it is _____. When our part of Earth faces away from the sun, it is _____.
6. The moon's _____ looks different every night. The moon _____ Earth. It takes a _____ to move all the way around.
7. Warm water on Earth _____ and rises into the air. Water in air cools and makes tiny _____. It _____ when the clouds are heavy with water.

Name _____

Natural Cycles

Directions: Cut out the pieces. Sort the pieces into the season cycle, moon cycle, and water cycle. Glue the cycle pieces in order on a piece of construction paper. The pieces will make a circle.



Cycle Template

