

# Seal Scientist



## Objective

Students will review their knowledge of time and clocks during imaginary seal watching.

## Background

Scientists in the Arctic study a seal's breathing pattern by waiting on the ice beside a seal's "breathing hole." This is the place where a seal pops up to the surface to take a breath of air. Often the hole is no larger than the size of a seal's neck.

## Materials

- Diving Time* worksheet
- clock teaching tool with moveable arms (available at most educational supply stores)
- 3" x 5" cards with one of the following written on each: 9 a.m., 9:10 a.m., 9:25 a.m., and 10:44 a.m.
- pencils

## Action

1. Distribute pencils and worksheets to each student.
2. For reading students: Choose one to four students to read the story at the top of the worksheet. As times are read, have students pick out the correct time on the 3" x 5" card. Discuss any questions students might have about the story.

For non-reading students: Read the story to them as they follow along on their paper. As a time is read, ask students to pick the card with the correct time. Or show the time on the clock teaching tool.

3. Ask students to answer questions on the worksheet. They can write their answers on the board and discuss how they found the answer. Younger students can move the hands on the clock teaching tool and count minutes.
4. After answering the questions, ask students to pretend they are scientists. What do they predict will happen in the afternoon? They can also draw a picture of themselves and the seal at the research camp.

### Deeper Depths

If you have a class pet (fish, guinea pig, etc.), have students watch its movements and draw or write what they see. Do they notice a pattern? Discuss results as a class.



Name \_\_\_\_\_

## My Day on the Ice

It was May 1 and the weather was mild, a warm 1.6 °C (35 °F). I picked up my folding chair and walked a short distance from the research camp onto the ice. I looked at my watch. It was 9 a.m. I began my study of seals.

As I walk toward the hole in the ice, a ringed seal rolled over and slipped into the water. I set up my chair, sat down, and waited quietly. At 9:10 a.m. the seal peeked through the hole to look at me, but slipped back into the water. I picked up my chair and moved back. At 9:25 a.m. the seal came out onto the ice. It stayed on the ice until 10:44 a.m. Then it dove and stayed under water for 10 minutes. The next time I saw the seal, it took a quick breath and dove again. My watch showed 10:55 a.m. I was getting cold, so I walked back to the research camp for some hot chocolate.

## Questions

What time did you start your study? \_\_\_\_\_ a.m.

What time did you end your study? \_\_\_\_\_ a.m.

How long did you study the seal? \_\_\_\_\_ minutes (\_\_\_\_\_ hours \_\_\_\_\_ minutes)

How long did the seal stay under water the first time? \_\_\_\_\_ a.m.

How long did the seal stay under water the second time? \_\_\_\_\_ a.m.

How long did the seal stay under water the third time? \_\_\_\_\_ a.m.

How long did the seal stay under water during the study time? \_\_\_\_\_ a.m.

How long did the seal stay on top of the ice during the study time? \_\_\_\_\_ a.m.