

Name _____



Hands-On Activity

Observe Patterns of Sunset

Materials

- a calendar
- a computer
- crayons
- drawing paper

Ask a Question

How does sunset change from season to season?

Test and Record Data

Explore online. 

Step 1

Identify the season and the date. Together, look up what time the sun will seem to set that day.



Step 2

Look up what time the sun will seem to set on a day in the next two seasons.

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Hands-On Activity small groups 1 class period

Observe Patterns of Sunset

3D Learning Objective

SEP Planning and Carrying Out Investigations

Children compare what time the sun seems to set in three different seasons. Children make a claim about how the time of sunset changes from season to season.

Materials calendar, computer, crayons, drawing paper

Preparation

Gather materials for groups. Arrange access to a variety of resources that includes daily sunset data. Alternatively, children may use the Internet to complete this activity.

Activity

As a class, view the video. Then discuss the question that will need to be answered. Have children record the question.

STEP 1 Guide children as they gather and record information. Remind them how to use a calendar to find the date, and lead a discussion to identify the current season. Observe and support children as they look up and record the time the sun will set.

CCC Patterns


STEP 2 Guide children to recall the pattern of seasons through the year and to use the pattern to identify the next two seasons. **Ask:** What is the pattern of seasons throughout the year? **spring, summer, fall, winter** Which season always comes after this one? Which season comes after that? Have them select a day for each season. Provide support as needed as the children research what time the sun will seem to set on each of these days.

Note that if children choose dates that are too close together (for example, one of the last days of spring and one of the first days of summer) the differences in the time that the sun seems to set will not be as evident.

Hands-On Activity, continued

SEP Planning and Carrying Out Investigations

STEP 3 Ask: How can you use the information about the times you saw in the section Patterns of Daylight to help you identify a pattern in your data? **I can compare my data to times from the Patterns in Daylight section.**

 **Reason Abstractly and Quantitatively** Children should look for patterns in their data, and apply what they found to the context of the question.

Claims, Evidence, and Reasoning

Children should make a claim that identifies the pattern of sunset as it relates to the selection of seasons. They should cite evidence to support the claim, including citing patterns observed earlier in this lesson. **Ask:** Did you identify a pattern? How does it compare to other patterns? **Sample answer:** I looked up the times of sunset in different seasons. I compared my results with the results I studied earlier in this lesson. The patterns are the same.

Scoring Rubric for Hands-On Activity

3	States a claim supported with evidence about how the time the sun seems to set changes from season to season
2	States a claim somewhat supported with evidence about how the time the sun seems to set changes from season to season
1	States a claim that is not supported by evidence
0	Does not state a claim and does not provide evidence

Step 3

Compare all the times you found. Record any patterns.

Make a claim that answers your question.

Sample answer: In winter, the sun seems to set earliest. In summer, the sun seems to set latest. In spring and fall, it seems to set at a time between winter and summer. This pattern repeats year after year.

What is your evidence?

Sample answer: I looked up the times of sunset in different seasons. I found a pattern in the data.