

DAY AND NIGHT LESSON PLAN



Time: approximately 10-15 minutes three times 1 day for Observing the Sun
approximately 45 minutes for research using PebbleGo Earth and Space

Instructional Goals:

- The student will use the PebbleGo Earth and Space online database to research day and night.
- The student will use subject directory searching to locate needed information.
- The student will recognize the sun as one of the objects in the sky.
- The student will observe and record the movement of the sun throughout a day.
- The student will complete research notes explaining day and night.
- The student will be introduced to the concept of citing sources using a simplified bibliography.

Materials/Resources:

- PebbleGo Earth and Space online database
- Observing the Sun data sheet (copy double-sided)
- Day and Night research booklet (copy double-sided)

Directions:

Focus

1. On a clear day, take students outside to observe and record the sun at three different times during the day. Make sure to instruct them not to look directly at the sun during their observation times.
2. Have each student stand or sit in the same spot for each observation time. As they are observing the sun, or right after observing the sun, have the students draw themselves and where the sun is located in the sky on the Observing the Sun data sheet.
3. After observing the sun at three different times during the day, have the students complete the prediction portion of the Observing the Sun data sheet. Students should predict where the sun will be in the sky when they are eating dinner that evening.

Teach/Model

4. As a class, discuss what is happening to the sun during the day. Have students brainstorm the reasons why the sun seems to be moving across the sky.
5. Have students predict where they think the sun will be when they go to sleep. Where do they think the sun goes at night? Ask students to brainstorm where the sun is at night when we cannot see it in the sky.

Guided Practice



6. Explain to students they will research what happens to the sun during the day and the night using PebbleGo Earth and Space.
7. Show students how subject directory searching works by clicking through the subject directory for Earth Science in PebbleGo Earth and Space. Note the different articles in the database for the students.
8. Show the students how to navigate to the article called Day and Night in the Earth Features section of PebbleGo Earth and Space.
9. Demonstrate the read-aloud function by clicking on the appropriate button and listening to the text being read aloud.
10. Show students the tabs at the top of the article that allow them to scroll through the information in the Day and Night article.
11. Demonstrate how students can use the Video button(s) to see a video. Explain they will need to watch the video, look at the pictures, and use the information in the text to help them complete their Day and Night research.
12. Explain to students that researchers must tell which source(s) they used to find their research information. The list of their information sources is called a bibliography. Demonstrate where they can locate the citation for this source by clicking on the Cite This Article button.

Independent Practice

13. Either divide students into pairs or have them work independently. Give each student or pair a Day and Night research booklet.
14. Explain to students they are to use the subject directory in PebbleGo Earth and Space to complete their Day and Night research booklet.
15. Monitor student progress as they work to complete the Day and Night research booklet.

Closure

16. Bring students together as a whole group to discuss the Day and Night research sheet. Go through the booklet to ensure everyone has the information completed correctly.

Extend/Enrich

- Students may act out the pattern of day and night with one student playing the part of the sun and another student acting as the Earth. Students may use a flashlight to help them envision the sun's light hitting part of the Earth while it spins.
- Students may complete Venn diagrams comparing day and night. Venn diagrams may include the activities of people and animals during the day and the night, as well as what the sky looks like and what is happening with the sun and Earth.
- Students may use PebbleGo Earth and Space to research the sun and the Earth to learn more about this topic.



Name: _____

Observing the Sun

Go outside. Observe the sun at three different times during the day.
(Do not look directly at the sun!)

Draw a picture showing you observing the sun and where the sun is located in the sky.

Observation 1

Time:

A large, empty rectangular box with a black border, intended for drawing a picture of observing the sun.

Observation 2

Time:

A large, empty rectangular box with a black border, intended for drawing a picture of observing the sun.



Name: _____

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Observation 3

Time:

A large, empty rectangular box with a black border, intended for students to write their observations.

**Predict where you think the sun will be in the sky when you eat dinner this evening.
Draw a picture.**

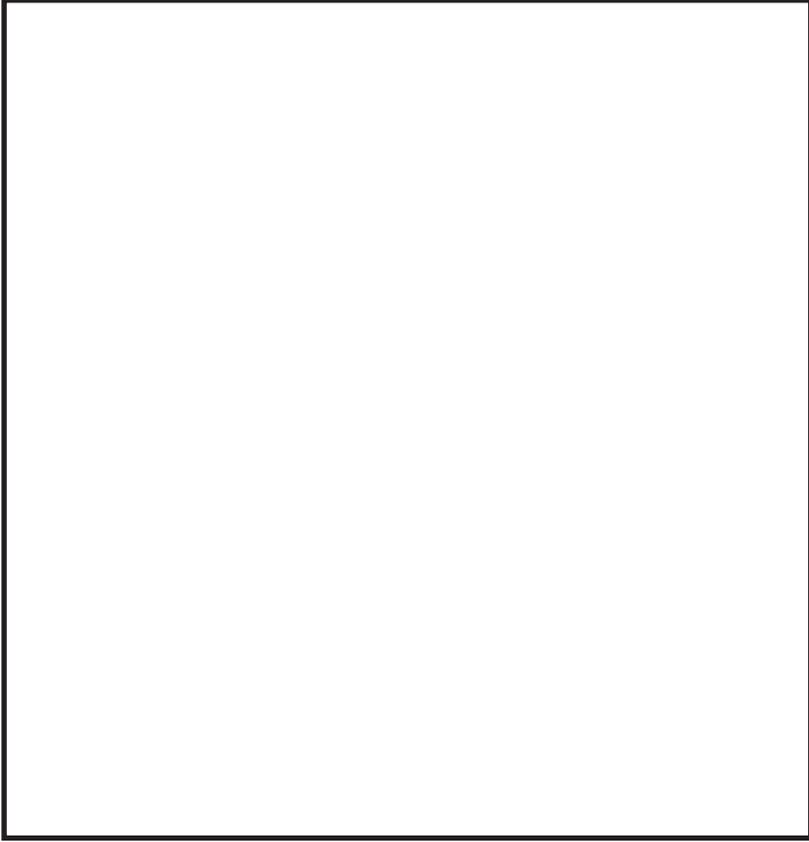
Prediction

Time:

A large, empty rectangular box with a black border, intended for students to draw a picture of the sun's position in the sky.

Where do you think the sun will be when you go to sleep tonight?

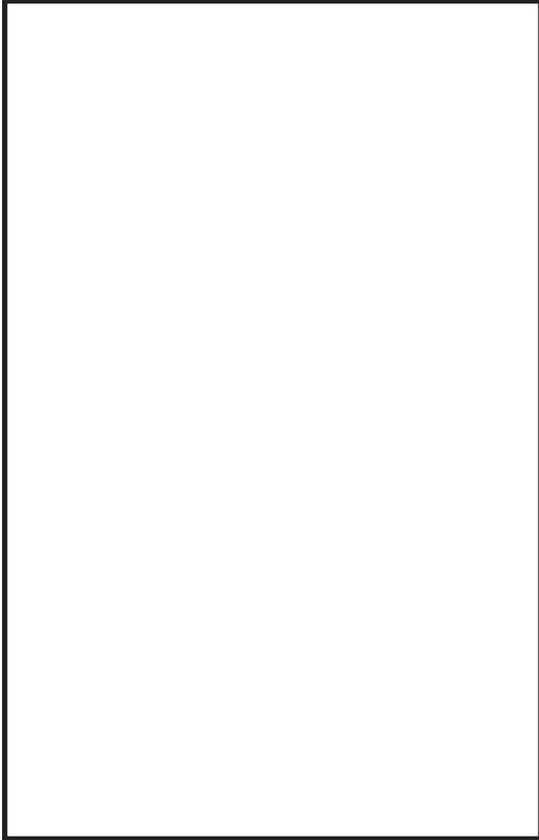
Research Notes about Day and Night



Draw one picture from your
Observing the Sun data sheet.

Research Notes by

Draw a picture showing how day and night happen. Show the sun and Earth in your picture.

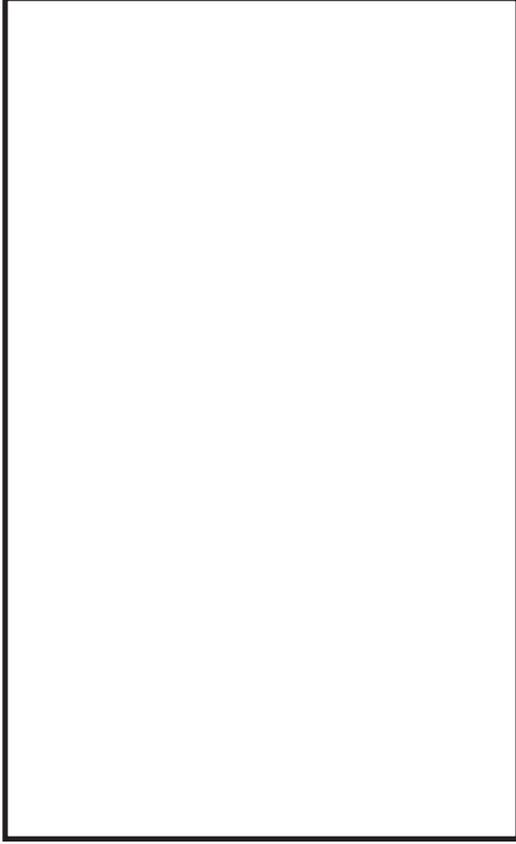


Label where day is happening and where night is happening.

Bibliography

I found my information in

Draw a picture of the sunset.



When is the sunset?

morning

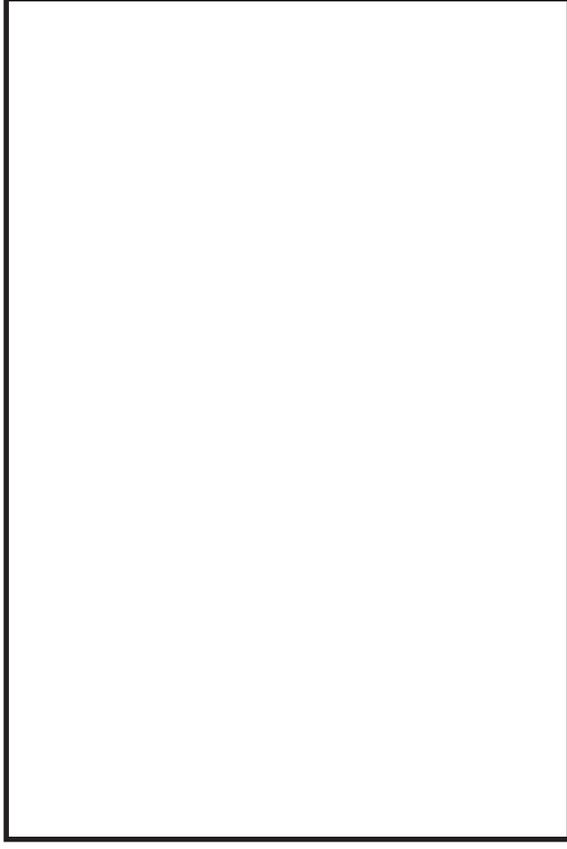
afternoon

evening

(Circle your answer.)

2

Draw a picture of the night sky.
Show the moon and stars in your picture.



How long does it take the Earth
to spin all the way around one time?



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