

FACES®

THE SUN AND THE MOON

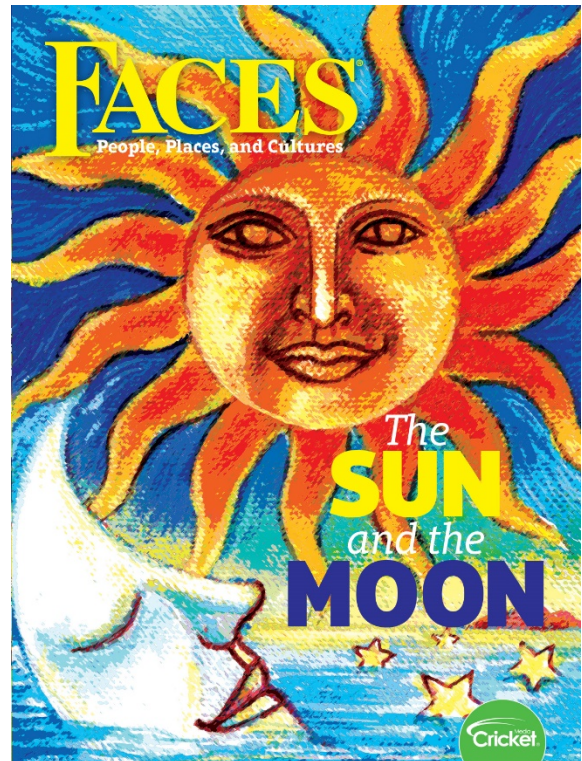
In this issue, students discover how the sun and moon have inspired the development of specialized calendars, religious pantheons, and mysterious cities in the mountains!

CONVERSATION QUESTION

How have different human cultures understood the importance of the sun and moon?

TEACHING OBJECTIVES

- Students will learn about the cultural characteristics of different human societies.
- Students will describe how cultural characteristics of places change over time.
- Students will explain how cultural patterns influence the daily lives of people.
- Students will explain how cultural and environmental characteristics make places different from one another.
- Students will use details from a text to write a story.
- Students will give a multimedia presentation.
- Students will write a script for a short documentary.



In addition to supplemental materials focused on core Social Studies skills, this flexible teaching tool offers vocabulary-building activities, questions for discussion, and cross-curricular activities.

SELECTIONS

- **Sun or Moon? The Solar and Lunar Calendars**
Expository Nonfiction, ~1050L
- **Apollo and Artemis**
Expository Nonfiction, ~1150L
- **Machu Picchu**
Expository Nonfiction, ~850L

Sun or Moon? The Solar and Lunar Calendars

pp. 8–11, Expository Nonfiction

Learn about the history of calendars and how people kept track of years before they had calendars.



RESOURCES

- Change over Time

OBJECTIVES

- Students will read and analyze a nonfiction article.
- Students will learn about the cultural characteristics of different human societies.
- Students will describe how cultural characteristics of places change over time.
- Students will use details from a text to write a story.

KEY VOCABULARY

- **astronomical cycles (p. 9)** the complete set of phases or orbit of a celestial object
- **orbit (p. 9)** the curved path of a celestial object around a star, planet, or moon
- **phases (p. 9)** stages of the moon or a planet, marked by the amount of its illumination

ENGAGE

Conversation Question: How have different human cultures understood the importance of the sun and the moon?

Ask students to share what they know about the origins of the 365-day calendar. Next, ask them how the way we measure time might be different if we relied upon the moon rather than the sun. Prompt them to hypothesize some examples of how our lives might be different if we used a lunar rather than solar calendar.

INTRODUCE VOCABULARY

Write the following sentences on the board. Then ask students to use the words from the vocabulary list to complete the sentences.

- There are many different types of _____, including the _____ of the moon (as seen from Earth) and the _____ of the Earth around the sun.
- The _____ of moon around the Earth creates the moon's _____ because the position of the moon relative to the Earth and sun changes.

READ & DISCUSS

Have students read the article with a partner. Then use these prompts for discussion:

1. What evidence is there to support the claim that prehistoric humans used the sun and moon to record the passage of time?
2. What are the main differences between solar and lunar calendars? What are some different types of solar and lunar calendars?
3. How are solar and lunar calendars used by different cultures, past and present?

CONCEPT/SKILL FOCUS: Describe Characteristics

INSTRUCT: Distribute copies of the *Change over Time* organizer. Explain to students that the cultural (e.g., social, political, etc.) characteristics of a place often change over time. Explain that the switch from one type of calendar to another is a major reason why cultural characteristics have changed over time across the globe.

ASSESS: Have students work in pairs to complete the *Change over Time* organizer and answer the question at the bottom of the page. Have students get together in small groups to share their responses.

EXTEND

English Language Arts Ask students to use print and digital sources to research one of the cultures mentioned in the article that uses both solar and lunar calendars. Then have students write a one-page story about a character who visits that area and discovers the use of these different calendars.

Change over Time

For each time period in the chart below, record details from the article about the methods humans used to track time. Then answer the question below the chart.

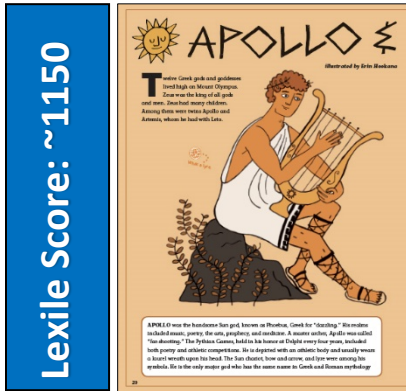
Time period	Methods used by human cultures to track time
32,000 B.C.E.	
3000s B.C.E.	
1500s–Present	

Question: How have cultural characteristics related to timekeeping changed over time? Use the details in your chart to help you answer the question. Write your answer on the back of this sheet.

Apollo and Artemis

pp. 20–21, Expository Nonfiction

Explore the attributes of Greek characters symbolizing the sun (Apollo) and the moon (Artemis).



ENGAGE

Conversation Question: How have different human cultures understood the importance of the sun and moon?

Ask students to share what they know about mythological representations of the sun and the moon. Can they name any mythological characters that represent either celestial body? Then introduce them to Apollo and Artemis—the Greek mythological characters representing the sun and the moon, respectively.

INTRODUCE VOCABULARY

Together, review the vocabulary words and read them aloud. Then ask students to make predictions about the topic of the text using the vocabulary words. If necessary, help students guess the topic by revealing the title of the article.

READ & DISCUSS

Have students read the article with a partner. Then use these prompts for discussion:

1. What were the origins of both Apollo and Artemis?
2. In what way did Apollo symbolize creativity for the ancient Greeks?
3. Why is Artemis usually depicted with an animal by her side?

CONCEPT/SKILL FOCUS: Explain Cultural Patterns

INSTRUCT: Explain to students that a cultural pattern can be any form of behavior, thing, or idea that is common among a group of people for a given period. Tell them that the article mentions details about how ancient Greeks thought about the sun and the moon. Also tell them that cultural patterns influence how people live their daily lives.

ASSESS: Have students reread the article to identify the impact that cultural patterns regarding conceptions of the sun had on how Greeks lived their daily lives. (*The Pythian Games were held to honor Apollo.*) Next, have students identify specific aspects of the Pythian Games that directly reflect the realms governed by Apollo.

EXTEND

English Language Arts Remind students that the article discusses the Pythian Games and how they were held in honor of Apollo. Have students use print and digital sources to research other examples of athletic competitions held by the ancient Greeks that were held in honor of a god or gods. Ask students to record their findings in a multimedia presentation. Finally, ask them to share their presentations with the class.

OBJECTIVES

- Students will read and analyze a nonfiction article.
- Students will learn about the cultural characteristics of different human societies.
- Students will explain how cultural patterns influence the daily lives of people.
- Students will give a multimedia presentation.

KEY VOCABULARY

- **laurel wreath (p. 20)** a round wreath made from leaves and branches and worn on the head in ancient times as a symbol of victory
- **chariot (p. 20)** a two-wheeled horse-drawn vehicle used in ancient warfare and racing
- **crescent (p. 22)** the curved sickle shape of the waxing or waning moon

Machu Picchu

pp. 24–27, Expository Nonfiction

Discover the mysterious connections between the ancient city of Machu Picchu and celestial objects.

Lexile Score: ~850



OBJECTIVES

- Students will read and analyze a nonfiction article.
- Students will learn about the cultural characteristics of different human societies.
- Students will explain how cultural and environmental characteristics make places different from one another.
- Students will write a script for short documentary.

KEY VOCABULARY

- **isolated** (p. 25) far away from other places, buildings, or people
- **observatory** (p. 26) a building from which scientists study and watch the sky
- **sacred** (p. 27) considered worthy of religious worship; very holy

ENGAGE

Conversation Question: How have different human cultures understood the importance of the sun and moon?

Ask students to imagine what life would be like if each neighborhood around a school had its own government? How would the neighborhoods work together on things like transporting students to school on buses? How might uniting the neighborhoods under one single government be beneficial?

INTRODUCE VOCABULARY

Define each word with students. Then arrange students in small groups and have them practice using all three words in a single sentence. Finally, tell students to look for these words as they read the article.

READ & DISCUSS

Have students read the article with a partner. Then use these prompts for discussion:

1. What building technique was used at Machu Picchu?
2. What evidence is there to suggest Machu Picchu was used to keep track of time?
3. Why was Machu Picchu built high in the mountains?

CONCEPT/SKILL FOCUS: Explain Place

INSTRUCT: Inform students that cultural and environmental characteristics of places, when combined, make places different from one another. Explain that ancient Machu Picchu had cultural and environmental characteristics that made it a unique place.

ASSESS: Have students work in groups of four or five. Ask each group to reread the article to identify the cultural characteristics (i.e., social/religious uses, building techniques) and environmental characteristics (i.e., geographic features, location) that make Machu Picchu a unique place. Finally, hold a class discussion where students share opinions on the guide's claim that Machu Picchu was an Inca sacred site used for ceremonial purposes.

EXTEND

English Language Arts Remind students that the article discusses some of the cultural and environmental characteristics that make Machu Picchu unique. Invite students to use print and digital sources to find out how Machu Picchu was built and used by the Inca. Then ask them to write a short script for a five-minute documentary about the various ways that Inca concepts of the sun and moon likely influenced where the city was built and how it was used.