

# click®

## TEACHING OBJECTIVES

- Students will read and analyze nonfiction articles
- Students will obtain, evaluate, and communicate information
- Students will use text features to understand concepts
- Students will develop and use models

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

## ISSUE TOPIC

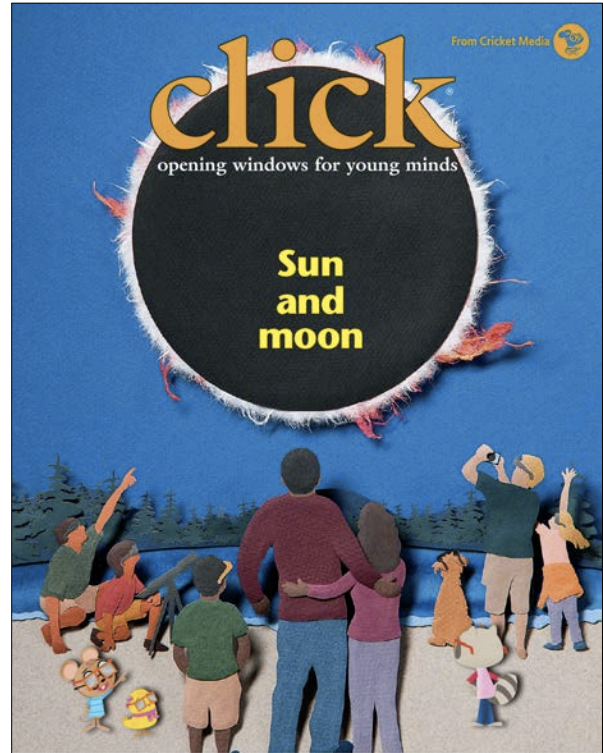
Take your students on a journey to explore the sun and the moon! Students use diagrams, photos, and models to understand the phases of the moon and what makes an eclipse. They will even hear a firsthand account of what it is like to walk on the moon!

## CONVERSATION QUESTION

How do we learn about space?

## ABOUT CLICK® MAGAZINE

Perfect for introducing young children to key STEM concepts, each issue of CLICK® focuses on a high-interest science theme, blending literary and informational texts, visuals, and activities in a format ideal for presenting multiple perspectives and inviting cross-genre comparisons.



## SELECTIONS

- **Reaching for the Moon**  
Narrative Nonfiction, ~740L
- **Hello, Sunshine!**  
Narrative Nonfiction, ~480L
- **What's an Eclipse?**  
Expository Nonfiction, ~900L

## CONNECTING CURIOUS MINDS

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## Reaching for the Moon pp. 11–17, Narrative Nonfiction

Lexile Score: ~740L



### THE ARTICLE

Join astronaut Buzz Aldrin as he describes his journey into space. Learn about the challenges and rewards of being the first humans on the moon!

### OBJECTIVES

- Students will read and analyze a nonfiction article
- Students will obtain, evaluate, and communicate information

### KEY VOCABULARY

- **aeronautics** (p. 12) a science that deals with airplanes and flying
- **astronaut** (p. 12) a person who travels in a spacecraft into outer space
- **astronautics** (p. 12) the science and technology of human space travel and exploration

### ENGAGE

**Conversation Question:** How do we learn about space?

Tell students they will be reading an article by an astronaut who was one of the first humans to journey to the moon. Have students imagine taking a journey to the moon. Guide them to visualize looking back at Earth as the moon gets closer and closer. Have students act out how it would feel to take the first steps on the moon. Ask students what they think the astronauts wanted to learn on their mission.

### INTRODUCE VOCABULARY

Have students copy the three vocabulary words. Ask them to compare the parts of these words that are the same. Explain the meaning of “astro-” —having to do with space, “aero-” —having to do with flying, and “-naut” —a suffix meaning “sailor.” Explain how these word parts are often found in vocabulary when reading about space and flight.

### READ & DISCUSS

Read the article with a partner, and then use these prompts for discussion:

- What are some of the most important training exercises Aldrin needed for this mission?
- What are some of the emotions Aldrin had during his experience in space?
- What important knowledge did the astronauts share with the world?

### CONCEPT FOCUS: Communicate Information

**INSTRUCT:** Remind students of the space flight they imagined before reading the article. Ask them what they learned from the article that helps them better imagine what it would be like to travel to the moon.

Have students write a journal entry describing a trip to the moon. Have them include ideas from the article as they write their own version of what they experience.

**ASSESS:** Ask students if they would like to be an astronaut. Have them use examples from the article to support their own opinion. Assess their knowledge by noting their understanding of supporting points.

### EXTEND

**Social Studies** Have students research and create a timeline of events leading up to: powered flight, landmark flights (trans-Atlantic), jet propulsion, manned space flight, and the Apollo missions culminating in lunar landings. Ask students to plot these historical events against events in an average human lifetime (Kitty Hawk = birth, Lindbergh trans-Atlantic flight = college graduation, etc.).

Hello, Sunshine!

pp. 20–22, Narrative Nonfiction

Lexile Score: ~480L



## THE ARTICLE

Students clear up misconceptions about the sun and moon through an imaginary conversation with the sun. This article is inviting to read aloud as students get into the act to hear what the sun has to say.

## OBJECTIVES

- Students will read and analyze a nonfiction article
- Students will obtain, evaluate, and communicate information
- Students will use models

## KEY VOCABULARY

**phase** (p. 22) one part in a series of related events

**reflecting** (p. 21) when light bounces from the surface of something

## ENGAGE

**Conversation Question:** How do we learn about space?

Introduce the article by telling students they will be hearing a conversation between a child and the sun. Have students brainstorm questions they might ask the sun if they were characters in the story.

## INTRODUCE VOCABULARY

Write the vocabulary words where they are visible to the class.

Together, read the words aloud. Ask volunteers to share possible meanings. Acknowledge correct meanings and draw simple illustrations to help students visualize these meanings related to the sun and moon.

## READ & DISCUSS

This article is written as a reader's theatre that invites students to choose a part and read this with a partner. After the reading, have students discuss the article using these prompts:

- What can we learn about the sun through observation?
- What can we learn about the moon through observation?
- What causes the different phases of the moon?

## CONCEPT FOCUS: Use Models

**INSTRUCT:** With a partner, have students locate and list information they learned about the sun, moon, and Earth through the characters' conversation. Students often think the moon makes its own light. Take this opportunity to help students gain knowledge that the moon reflects light from the sun.

Ask students to think about how each piece of information is known. Discuss how we know the sun is a star, the moon does not make its own light, and how the shape of the moon we see is caused by the sun's reflection and the Earth's shadow.

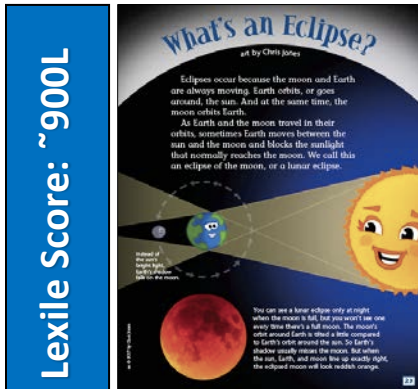
**ASSESS:** Students make a model to demonstrate the different phases of the moon. Allow students to choose what materials to use and if they want the model to be two- or three-dimensional. Have students share their models and explain what they understand about the relationship between the sun, moon, and Earth.

## EXTEND

**Language Arts** Students write a dialogue between a child and the moon. Have the child character ask questions and the moon supply the answers. Invite students to read their scripts aloud with a partner.

## What's an Eclipse?

pp. 23–26, Expository Nonfiction



### THE ARTICLE

How can the moon or sun seem to disappear right before our eyes? Find out what is known about solar and lunar eclipses.

### RESOURCES

- **Causes and Effects Organizer**

### OBJECTIVES

- Students will read and analyze a nonfiction article
- Students will use text features to understand concepts
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### KEY VOCABULARY

- **lunar eclipse (p. 23)** when the Earth moves between the sun and moon, blocking light from reaching the moon
- **solar eclipse (p. 24)** when the moon passes between the sun and Earth, blocking the sun
- **orbit (p. 23)** to travel around something, such as a planet or moon, in a curved path

### ENGAGE

**Conversation Question:** How do we know about space?

Ask students to share what they know about an eclipse. Write this information on a chart. Refer to this chart as you read, discuss, and interact with the content in the article. Add information or correct misconceptions as more information is learned. Ask students to explain how they know the information is correct.

### INTRODUCE VOCABULARY

Write the vocabulary words where they are visible to the class.

Together, read the words aloud. Ask volunteers to share possible meanings. Acknowledge correct meanings and then read the definitions aloud. Finally, tell students to look for these words as they read the article.

### READ & DISCUSS

Read the article together as a class, then lead a discussion with the following questions:

- What happens during a lunar eclipse?
- How might scientists study a lunar eclipse?
- What happens during a solar eclipse?
- Why do you think scientists are excited when a total eclipse of the sun occurs?

### CONCEPT FOCUS: Develop Models

**INSTRUCT:** Demonstrate the concept of a solar eclipse through creative dramatics. Pick three volunteers, one as the sun, one as the moon, and one as Earth. Use a large area clear of obstacles. Have the sun student stand in the middle as the Earth walks (orbits) around the sun. Explain that the Earth would also be spinning to create night/day, but not with this model to avoid Earth getting dizzy! Next, add the moon, which will walk in circles around Earth. Be sure students do this slowly! Ask volunteers to be directors and tell the actors when to stop at a position of a lunar and solar eclipse. Discuss how this model helps to show what needs to happen for an eclipse to occur.

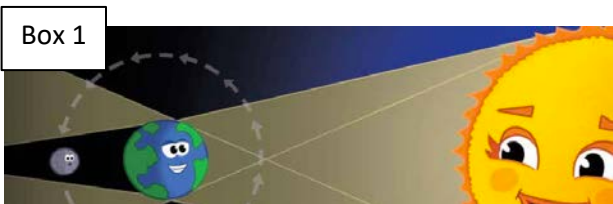
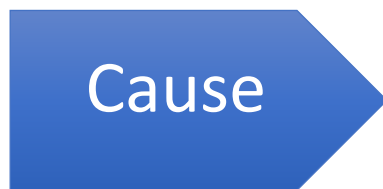
**ASSESS:** Have students repeat the modeling in groups of four, with three being the actors and the fourth the director. Take turns so each director has a chance to align the sun, moon, and Earth and explain how this demonstrates an eclipse.

### EXTEND

**Engineering Design** Use the **Causes and Effects Organizer** to help students employ design thinking as they draw, and show them how to use diagrams to explain the phenomena of solar and lunar eclipses.

Scientists use cause and effect to help understand how things work. Fill in the missing information.

1. What is the effect from the first diagram? Write this in box 2.
2. Draw an arrow in box 1 to show where you would be observing this.
3. Examine box 4. In box 3 draw how the sun, moon, and Earth are lined up to create the solar eclipse.
4. Draw an arrow in box 3 to show where you would be observing the solar eclipse.



Where would you be standing to see the eclipse?

