

Focus Question:

What is the relationship between the movements of the Earth, Moon, and Sun?

Book Summary

Text Type: Nonfiction/Informational

The Sun, the Earth, and the Moon are constantly interacting with each other in a complex dance. *The Sun, Earth, and Moon* describes the effects of the movements of the Sun, Earth, and Moon, including what causes high and low tides, why we have different seasons, and what happens during solar and lunar eclipses. The text is supported by descriptive photographs and informative diagrams. Readers will be able to hone their nonfiction reading skills by using labels to help navigate their way through the text. Students will also have the opportunity to make inferences and draw conclusions and to identify complex sentences in the text.



Lesson Essentials

Instructional Focus

- ☐ Visualize to understand text
- ☐ Make inferences and draw conclusions
- ☐ Describe information provided by labels
- ☐ Recognize and create complex sentences
- ☐ Recognize and use homophones

Materials

- ☐ Book: *The Sun, Earth, and Moon* (copy for each student)
- ☐ Make inferences / draw conclusions, complex sentences, homophones worksheets
- ☐ Discussion cards
- ☐ Book quiz
- ☐ Retelling rubric

Vocabulary

Boldface vocabulary words also appear in a pre-made lesson for this title on VocabularyA-Z.com.

• Words to Know

Story critical: *eclipse* (n.), *gravity* (n.), *revolution* (n.), *rotation* (n.), *tides* (n.)

- **Academic vocabulary:** *affect* (v.), *cycle* (n.), *exactly* (adv.), *opposite* (adj.), *same* (adj.), *visible* (adj.)

Guiding the Reading

Before Reading

Build Background

- Ask students to think about the Sun and the Moon. Invite students to list some of the differences between them.
- Draw a picture of the Sun, Earth, and Moon on the board. Encourage students to think about why they are important to us. Ask students if they have any prior knowledge about how the Sun, Earth, and Moon interact with one another. Invite volunteers to share their answers with the class.

Introduce the Book

- Give students their copy of *The Sun, Earth, and Moon*. Guide them to the front and back covers and read the title. Have students discuss what they see on the covers. Encourage them to offer ideas as to what type of book it is (genre, text type, and so on) and what it might be about.
- Show students the title page. Discuss the information on the page (title of book, author's name).

Introduce the Reading Strategy: Visualize

Introduce students to the term visualize and explain that engaged readers create pictures, or images, in their mind as they read to better understand what they are reading. Explain that readers can make visual images using information from the text and what they already know about the subject. Ask students to close their eyes and visualize as you read aloud page 4. Have students draw what they visualized on a piece of paper. Reveal the image on page 4 and invite volunteers to share the similarities and differences between their illustration and the image in the book. Explain to students that their visualizations will not be exactly the same because we all have different background knowledge and we all visualize things differently. Remind students that creating images in their mind will help them understand what they read.

Guiding the Reading (cont.)

Introduce the Comprehension Skill:

Make inferences / draw conclusions

- Explain to students that sometimes authors give readers clues that help them figure out something that is not specifically written in the text. Point out that using what students already know and connecting it to evidence in the text in order to read between the lines is called *making inferences or drawing conclusions*.
- Write the following clues on the board: *I reflect the light of the Sun. I rotate around the Earth. My shape changes every night. What am I?* Ask students to identify the object using the clues provided. Explain to students that they used prior knowledge about the Moon to draw a conclusion. Explain that doing this as they read—using what is in the text and pictures and connecting it to what they already know—will help them better understand what they read.

Vocabulary

Have students turn to the “Words to Know” box on the copyright page. Discuss each word with students. Then, have students turn to the glossary on page 16. Explain that the glossary provides definitions for the vocabulary words in the book. Point out the use of each content word and academic vocabulary word in the book, and then use each word in a different model sentence. Have students work in groups to create posters for these words. Have them include on each poster the word and its part of speech, the definition, the word in an example sentence, and a picture illustrating the meaning of the word.

Set the Purpose

- Have students read to find out about the relationship between the Sun, the Earth, and the Moon. Write the Focus Question on the board. Invite students to look for evidence in the book to support their answer to the question.
- Have students make a small question mark in their book beside any word they do not understand or cannot pronounce. These can be addressed in a future discussion.

During Reading

Text-Dependent Questions

As students read the book, monitor their understanding with the following questions. Encourage students to support their answers by citing evidence from the book.

- *What makes up the solar system?* (level 1) page 4
- *How is a rotation different from a revolution? Which takes longer for the Earth to complete?* (level 2) pages 5 and 6

- *Why must a leap year be added to the calendar every four years?* (level 1) page 6
- *How are the rotations of Earth and the Moon different? What causes these differences?* (level 3) pages 8 and 9
- *How does the Moon affect the tides on Earth?* (level 2) pages 10 and 11
- *Are solar and lunar eclipses visible to everyone on Earth? Why or why not?* (level 2) pages 13 and 14
- *Do solar and lunar eclipses occur often? Why or why not?* (level 3) multiple pages

Text Features: Labels

Explain that labels clarify photographs and diagrams for readers by identifying specific parts. Point out that labels are often used in nonfiction text to describe things readers may have no prior knowledge about or define parts of a photograph. Have students review the picture on page 5. Ask students: *Where is the Earth’s axis? Is the location different from what you may have visualized? How do the labels in the picture support the main idea of this section? How do labels clarify visual information? Why are labels an important tool?* Have students work in groups to review other pictures in the book and discuss in groups how labels provide important details about the story. Ask students to identify other labels that could be added to the pictures and why. Invite volunteers to share their ideas with the class.

Skill Review

- Model for students how you create visual images as you read. Ask students to stop at several points during reading to share with a partner what they visualized. Point out that visualizing can help them to better understand the text.
- Model how to make inferences and draw conclusions from the text.
Think-aloud: *Earlier, we used clues and combined them with what we already knew to determine that the object the clues referred to was the Moon. We also learned that the author gives clues in the book that can be used to make inferences and draw conclusions about details that aren’t in the text. Throughout the book, we discovered the relationship between the movements of the Sun, Earth, and Moon. On page 7, I can see that it is summer in the northern hemisphere when the top half of the Earth is tilted toward the Sun. I can infer that it is hotter during this season because the heat of the Sun is hitting the northern hemisphere at a direct angle. I know that in the summer, the amount of daily sunlight is greater. I can infer that the tilt of the Earth causes longer days. I can also use my prior knowledge about the seasons to conclude that the tilting of the Earth is very gradual because the seasons change over the course of many months. Using what I already know and clues from the book while I read helps me make inferences and draw conclusions.*

Guiding the Reading (cont.)

- Model how to complete the **make-inferences-draw-conclusions worksheet**. Have students work with a partner to find the answers by combining their prior knowledge with the text.

After Reading

Ask students what words, if any, they marked in their book. Use this opportunity to model how they can read these words using decoding strategies and context clues.

Skill Review

Graphic Organizer:

Make inferences / draw conclusions

Review the make-inferences-draw-conclusions worksheet that students completed. Have students share their work in groups. Invite volunteers to share with the rest of the class how they connected their prior knowledge to the text to answer the questions. Invite students to create their own clues and have a partner draw conclusions by combining the clues with prior knowledge. Encourage students to share their clues and their partner's inferences with the class.

Comprehension Extension

Discussion cards covering comprehension skills and strategies not explicitly taught with the book are provided to be used for extension activities.

Response to Focus Question

Have students cite specific evidence from the book to answer the Focus Question. (Answers will vary. Answers should include the effects the Sun and Moon have on the Earth, such as changing seasons; guiding the length of days, months, and years; and creating high and low tides. Sample: *The Earth revolves around the Sun, and this orbit paired with the tilt of the Earth causes the seasons. The pull of the Moon's gravity causes the oceans to bulge toward the Moon, causing high and low tides. Our calendar is based on the rotation of the Earth, the revolution of the Moon around the Earth, and the revolution of the Earth around the Sun.*)

Comprehension Checks

- **Book quiz**
- **Retelling rubric**

Book Extension Activities

Build Skills

Grammar and Mechanics: **Complex sentences**

- Explain to students that a *complex sentence* is a sentence that contains an independent clause and a dependent clause connected by a conjunction, such as *although, if, unless, since, when, or because*.

- Draw a picture of the Sun on the board. Explain to students that the Sun is independent because it does not revolve around any of the planets. In the same way, an independent clause is an idea that can stand alone. Write: *The Sun is the closest star to Earth.*
- Draw a picture of Earth orbiting the Sun on the board. Explain to students that Earth is dependent, because without the Sun's gravitational pull Earth would fly off into space. Just as the Earth needs the Sun, a dependent clause cannot stand alone. In the picture of the Earth, write *other stars are bigger*. Along the path of the orbit, write the word *although*.
- Combine the sentence clauses and write: *Although other stars are bigger, the Sun is the closest star to Earth.* Explain to students that the sentence can be written in a different order, but is still complex as long as there is an independent and dependent clause. Write *The sun is the closest star to Earth, although other stars are bigger.*
- **Check for understanding:** Write the following sentence on the board: *When this happens, it is summer in the northern hemisphere.* Ask students to identify the independent clause, the dependent clause, and the conjunction with a partner. Invite volunteers to share their examples with the class.
- **Independent practice:** Introduce, explain, and have students complete the **complex sentences worksheet**. If time allows, discuss their answers.

Word Work: **Homophones**

- Write the following sentence on the board: *Earth's rotation produces the endless cycle of day and night.* Circle the word *night*. Ask students to explain what the word refers to (*time of day*).
- Write the following sentence on the board: *The knight defeated the dragon.* Circle the word *knight*. Ask students to explain what the word refers to (*a person*).
- Ask students to identify which words in the sentences sound the same but are spelled differently and have different meanings (*night, knight*). Write these words on the board. Explain that words that sound the same but are spelled differently and have different meanings are called *homophones*. Repeat the process for the pairs *two, too, and hour, our*.
- Invite students to share other homophone pairs they know. Write these pairs on the board.
- **Check for understanding:** Invite students to choose a homophone pair. Have students create a sentence for each word and share them with a partner. Ask volunteers to share their sentences aloud.
- **Independent practice:** Introduce, explain, and have students complete the **homophones worksheet**. If time allows, discuss their answers.

Connections

- See the back of the book for cross-curricular extension ideas.