Lesson 3: A Bee's Life

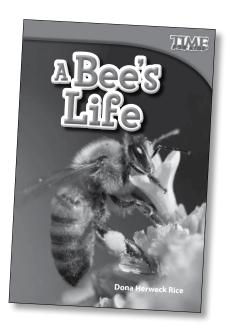
Focus Objectives

Students will be able to:

- use self-correction strategies to monitor comprehension
- use mental images based on pictures and print to aid in comprehension of text

TESOL Objective

Students will use English to interact in the classroom.



Word Work

- **High-Frequency Words:** many, each, very, soon, from
- Word Study: Word chunk patterns

 ee and -ive

Academic Vocabulary Words

- bee
- honey
- larva
- pupa
- Know Your Words activity sheet (page 63)

Comprehension

- Monitoring Comprehension
- Using Mental Images
- Life Cycle of a Bee activity sheet (page 64)

Writing

Use high-frequency and vocabulary words to write words, phrases, or sentences.

Cross-curricular Connections

- Mathematics: Students extend simple patterns.
- Science: Students know that plants and animals progress through life cycles of birth, growth and development, reproduction, and death; the details of these life cycles are different for different organisms.

Building Fluency

- Reading the Book: repeated readings with audio support; choral reading
- Reading the Poem: poetry folder; repeated readings
- "A Bee's Life" poem (page 62)

Lesson 3: A Bee's Life (cont.)

Word Work

- 1. **High-Frequency Words**—Write the words many, each, very, soon, and from on the board. Read each word aloud. Depending on students' abilities, you may wish to introduce the high-frequency words one at a time.
 - Write each word on an index card.
 Place the index cards on the floor about
 two feet away. Give each student a
 beanbag to toss onto the cards. Have
 students read the word on the index
 card nearest their beanbag. Repeat the
 activity.
 - If you have a classroom word wall, have students add the high-frequency words to it. As time permits, have the class read the word wall together to reinforce mastery of high-frequency words.

- **2. Word Study**—Write the –*ee* word chunk on a sheet of chart paper using a red marker.
 - Have students brainstorm words that end with -ee (bee, fee, knee, see). Write these words on the chart.
 - Repeat the process above for the

 ive word chunk (dive, five, hive, live).

When making index cards for the beanbag game, include other high-frequency words to reinforce learning.

Academic Vocabulary

- Display a picture of a bee. Develop students' vocabulary by listing words that students can name that describe bees. Your chart may look similar to the chart on the right.
- 2. Instruct students to add high-frequency and vocabulary words to their dictionaries. Encourage them to write a word, phrase, or sentence for each word and include a picture.
- **3.** For additional practice with the academic vocabulary in this lesson, have students complete the *Know Your Words* activity sheet (page 63).

	Bees
yellow	black
buzzing	stingers
honey	quick
flying	hives

Comprehension

Before Reading

- **1. Monitoring Comprehension**—Display the cover of the book. Read the title aloud, but say, "Bees Live" instead of "A Bee's Life." Then look puzzled and say, "Wait a minute, did I read that right?" Model rereading carefully. Tell students that good readers go back to reread words or titles if they do not sound right.
- **2. Introducing the Book**—Show students the cover of the book. Invite them to describe what they see in the picture. Read students the title.
 - · Ask students if they think the book will be real or make-believe (nonfiction or fiction).

them why the author included one.

 Ask them if they can make some predictions about the life cycle of bees after previewing the book and reading other books about life cycles. Explain to students that a bee's life cycle is similar to but also different from a butterfly's and a frog's. Ask them to be on the lookout for similarities and differences. Show students the picture glossary, and ask

English Language Support

Use the photos on pages 18 and 19 of the book to develop students' background about bees and their life cycles. Discuss the important things that bees do, such as pollinate flowers and make honey. Put students in pairs and have them ask each other questions about bees (What is this called?) and what they do (What do bees do?).

During Reading

- 1. Using Mental Images—Explain to students that you will read the book aloud without showing them the pictures.
 - Tell them that authors often include pictures with a text to help readers understand the words, but that if pictures are not included, they can create them in their heads by visualizing. Tell students visualizing will help support their comprehension.
 - Read the book aloud to students. After each page, pause and allow student to share their visual images. For example, after reading "She lays many eggs," a student might say, "I imagine a bee with a lot of eggs around her."
- **2. Monitoring Comprehension**—Read the book with students using the choral-reading strategy. On page 3 of the book, misread the sentence as "First, there is a green bee." Point out that there is no green bee in the picture. Then ask for help and reread the word *queen*. Also model using self-correction strategies on page 7 (reading *alive* instead of *larva*), and page 8 (reading *pupil* instead of *pupa*). Praise students for catching mistakes and rereading the text as a way to improve their comprehension.



Assessment Opportunity—Monitor students to ensure they read the high-frequency words accurately.

Lesson 3: A Bee's Life (cont.)

Comprehension (cont.)

After Reading

- **1. Monitoring Comprehension**—Ask students which of their predictions about the book were correct. Ask them to summarize how the life cycle of bees is the same as and different from other life cycles. For additional practice with comprehension, have students complete the *Life Cycle of a Bee* activity sheet (page 64).
- 2. Building Oral Language—Refer to the *Bees* chart you created at the beginning of the lesson. Challenge students to use the words on the chart. Pair students. Ask one student from each pairing to pick a word from the chart and describe it without actually using the word. Have the other student guess the word. Have students switch roles and play again.

English Language Support

Bring in a spoon, some honeycomb, and a jar of honey, and ask students to describe the two items, using words such as *solid*, *liquid*, *soft*, and *sticky*. Make a Venn diagram to compare and contrast them, introducing words for students to practice such as *same*, *both*, and *different*.

Writing

Have students write about a bee's life cycle.

- Give below-grade-level students a word bank to use when writing.
- Have on-grade-level students say the sounds in the words slowly and write each sound they hear.
- Encourage above-grade-level students to write sentences that include explanations about each of the phases in a bee's life cycle.

Cross-curricular Connections



Math—Make a quick sketch of a honeycomb, a bee, and a flower (or photocopy images from the book) and copy enough for each student to have several of each. Create an ABA pattern on the board using the photocopies. Have students extend the pattern. Then challenge students to make their own patterns, such as ABBA or ABCA, and have a classmate extend them.



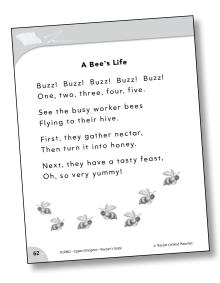
Science—Make life-cycle charts for honey bees. Restate the stages of a bee's life (*egg, larva, pupa,* and *adult bee*), and instruct students to illustrate and label the stages.

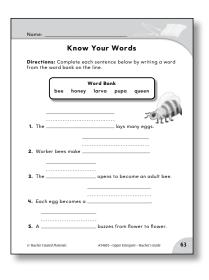
Building Fluency

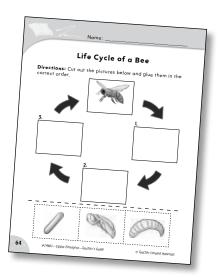
- **1. Reading the Book**—Use one or more of the following methods for fluency practice:
 - Use a copy of the book (provided on the Teacher Resource CD) along with the professional audio recording (provided on the Audio CD) so students can practice reading the book to build fluency. Listening to the book being read aloud will give students an idea of how to use proper intonation, expression, and pacing when reading.
 - Use the choral-reading strategy to read the book several times with students and allow students to practice reading the book silently and in pairs.
- **2. Reading the Poem**—Use one or more of the following methods for fluency practice:
 - Display the poem "A Bee's Life" (page 62). Compare and contrast the book and the poem. by asking students questions, such as "How is the poem similar to or different from the book?" Put movements to the poem, allowing students to portray the five buzzing bees working together to make and eat honey.
 - Provide copies of the poem for students to place in their poetry folders. They can practice reading the poem during free-choice time and independent or paired reading time.
 - Write the poem on a sheet of chart paper. Have students reread it throughout the day. Choral and repeated readings help build fluency. Encourage students to create actions, gestures, or a tune to go along with the poem.



Assessment Opportunities—Use the oral reading record and the fluency rubric provided in the Assessment Guide to assess students' ability to read the book and poem fluently and accurately.







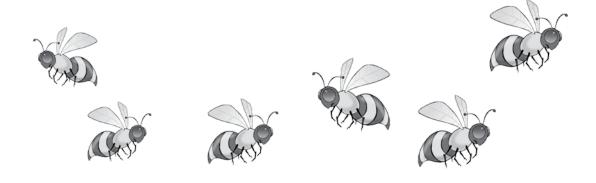
A Bee's Life

Buzz! Buzz! Buzz! Buzz! Buzz! One, two, three, four, five.

See the busy worker bees Flying to their hive.

First, they gather nectar, Then turn it into honey.

Next, they have a tasty feast, Oh, so very yummy!



Name:				

Know Your Words

Directions: Complete each sentence below by writing a word from the word bank on the line.

Word Bank bee honey larva pupa queen

 -	_	_	-	-	_	-	-	-	-	-	-	-	-	_	-	-	-	_	-	_	-	_	-	-	-	-



_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

2. Worker bees make ______.

3. The _____ opens to become an adult bee.



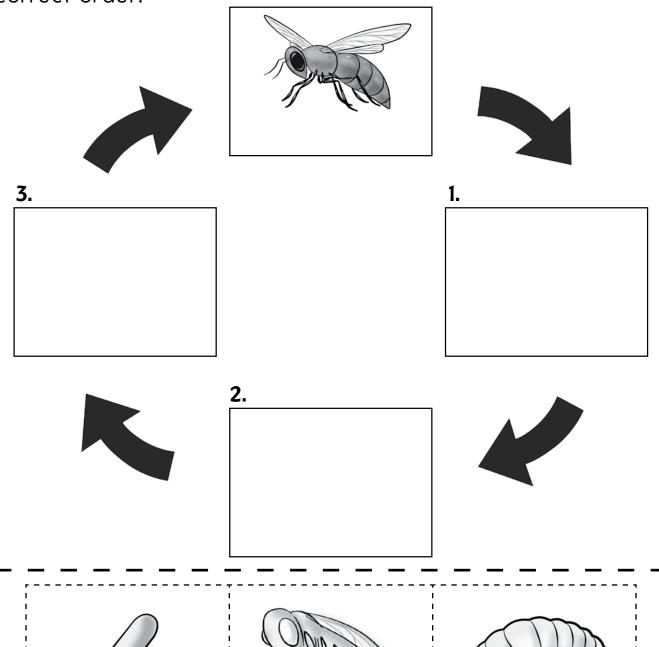
4. Each egg becomes a ______.



5. A _____ buzzes from flower to flower.

Life Cycle of a Bee

Directions: Cut out the pictures below and glue them in the correct order.





Light Makes a Rainbow



Learning Objectives

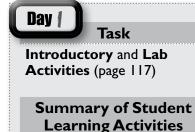
Students will:

- identify details the author gives to support the main idea of the book.
- write an opinion about rainbows.
- describe how light bends and splits to make a rainbow.

Standards

- Reading: Identify the reasons the author gives to support points in a text.
- Writing: Write opinion pieces in which they introduce the topic, or name the book they are writing about, state an opinion, supply a reason for the opinion, and provide some sense of closure.
- Content: Know that light travels in a straight line until it strikes an object.
- Language: Communicate information, ideas, and concepts necessary for academic success in the content area of Science.

Lesson Timeline



Observe and record rainbows.

Day 2 Task

Before Reading (page 118)

Summary of Student Learning Activities

Predict details that might be included in the book.

Day 3

Task

During Reading (page 119)

Summary of Student Learning Activities

Identify important details in the book and write their favorite thing about rainbows.

Day 4

Task

After Reading (page 120)

Summary of Student Learning Activities

Identify details the author uses to support the main idea.

Day *5*

Task

Activity from the Book (page 120) and Assessments (pages 125–126)

Summary of Student Learning Activities

Spin wheels of color to see white light and take the assessments.



- copies of the I Saw a Rainbow! activity sheet (page 121)
- playground ball
- spray bottles
- water



Introductory Activity

Engage

- Show students a playground ball and ask what would happen if you opened the door and threw the ball through the doorway. Demonstrate by throwing the ball through the doorway. Help students determine that the door did not get in the way of the ball.
- Repeat the activity with the door closed.
 Ask students to predict what will happen,
 and then demonstrate.
- 3. Finally, repeat the activity with the door about three quarters of the way open. Make sure to throw the ball so that it still makes it through the doorway but bounces off the door. Tell students that they will learn how light moves in a similar way.

Lab Activity

Explore & Explain

- Distribute spray bottles filled with water to students. Head outside on a sunny day. Tell students to first spray their bottles in the shade. Then, have students stand in the sun with their backs to it and spray the bottles quickly with their arms outstretched. **Note:** You may wish to use a hose with a mist setting if students are unable to see the rainbows from the spray bottles.
- Ask questions to guide students to the idea that the rainbow is caused by water and sunlight.
 - What do you see when you spray the water?
 - ➤ Why do you think this happens?
 - ➤ What happened when you sprayed the water in the shade?

- 3. Bring the class together for instruction. Ask students to share their observations and understanding of what caused the rainbows. Clarify any misconceptions students may have about what happens to light when it goes through water. Refer back to the introductory activity to give students additional context.
- 4. Distribute copies of the I Saw a Rainbow! activity sheet (page 121) to students. Read the directions aloud. Have students draw and write what happened when they sprayed their bottles. Ask them to explain their drawings to you as they work.



Light Makes a Rainbow (cont.)

Materials

- Light Makes a Rainbow books
- copies of the Knowledge Rating Scale activity sheet (page 122)
- chart paper



Predict details that might be included in the book.



Vocabulary Word Bank

- energy
- scientists
- light waves
- wavelength

Before Reading

Elaborate

- Distribute copies of the Knowledge Rating Scale activity sheet (page 122) to students. Read the directions and the words aloud. Have students rate their knowledge of each of the words individually by writing Xs on the chart. Have students share definitions or examples of words they know well. Clarify any misconceptions students may have. Use these charts for further planning.
- 2. Display the front cover of the book and read the title aloud. Ask students what they already know about rainbows just from looking at the picture. Encourage them to use clues in the picture.
- 3. Ask students, what they think the book will be about. Ask them to name important facts or details about rainbows that they think might be included in the book. Record student responses on chart paper. Save this to use later in the lesson.
 - Challenge above-level learners to discern between important details and less significant details that the author may leave out of the book.



- Light Makes a Rainbow books
- copies of the Rainbow Write activity sheet (page 123)



Identify important details in the book and write their favorite thing about rainbows.

During Reading

Elaborate

- Distribute the Light Makes a Rainbow books to students. For the first reading of the book, read aloud as students follow along. After each page, pause to point out important details that the author included about rainbows.
- Refer back to the list of predictions students made in the Before Reading section. Ask students which of their predictions about the book were correct. Explain how each correct prediction is related to the text.
 - You may choose to display the Interactiv-eBook for a more digitally enhanced reading experience.
- 3. For the second reading of the book, have students read in pairs. Instruct students to take turns reading pages aloud with their partners. Ask them to pause after each page spread and discuss the main idea of each page as they read.
 - For below-level learners and English language learners, you may choose to play the audio recording as students follow along to serve as a model of fluent reading. This may be done in small groups or at a listening station. The recordings will help struggling readers practice fluency and aid in comprehension.

- 4. Distribute copies of the Rainbow Write activity sheet (page 123) to students. Read the directions aloud. Then, have each student write his or her favorite thing about rainbows using academic vocabulary. Challenge students to use at least one of the words in the Word Bank in their writing. Bind students' work together to create a class book about rainbows. Note: As an alternative, you may wish to have students publish their ideas on a blog or class website.
 - Encourage below-level learners and English language learners to write each sound they hear in order to write words, phrases, and sentences.
 - Encourage **above-level learners** to write a paragraph that includes a main idea and supporting details.



Light Makes a Rainbow (cont.)

Materials

- Light Makes a Rainbow books
- copies of the Supporting Points, Light Makes a Rainbow Quiz, and Rainbow Data activity sheets (pages 124–126)
- · coloring supplies



Identify details the author uses to support the main idea. Spin wheels of color to see white light and take the assessments.

After Reading

Elaborate & Evaluate

- Create four stations around the room: definition, sentence, synonyms, and picture. Divide students into small groups. Assign each group a word. Have groups go around the room and complete the task at each station. After students have visited all four stations, discuss the words as a class.
- 2. Distribute the Light Makes a Rainbow book to students. Ask them to tell you what the book was about. Let students explain in their own words how light makes a rainbow. Then, have students list supporting details. Record student responses on the board. As a class, discuss why the author would include these details in the book.
- 3. Distribute copies of the Supporting Points activity sheet (page 124) to students. Read the directions aloud. Have students list details that support the main idea. As students work independently, ask them how the details they list support the main idea. Encourage students to use the book's text and pictures to help them.

Activity from the Book

Read the Your Turn! prompt aloud from page 24 of the *Light Makes a Rainbow* book. Have students create circles with six colors on them. Then, have students spin the circles quickly on a pencil. If they spin it fast enough, the colors should start to blend together and appear white.

- A short posttest, Light Makes a Rainbow Quiz (page 125), is provided to assess student learning from the book.
- 2. A data analysis activity, Rainbow Data (page 126), is provided to assess students' understanding of how to analyze scientific data. Read the directions aloud. Point to the calendar and read the key. Point out the days of the week at the top of the calendar. Explain to students that Marco added a rainbow each day he saw a rainbow. **Note:** You may need to preteach the skill of reading calendars prior to giving this assessment.
- 3. The Interactiv-eBook activities may be used as a form of assessment (optional).



Name:	Date:											
I Saw a I	Rainbow!											
irections: Spray the bottle in the shade. Draw what happened. pray the bottle in the sun. Draw what happened.												
Shade	Sun											
What did you notice?	<u>I</u>											



Name:	Date:

Knowledge Rating Scale

Directions: Think about each of the words below. Write an X on the chart to show how well you know each word.

Word	I know it well.	I have seen it or heard it.	l do not know it at all.
energy			
light waves			
scientists			
wavelength			



ə:		 	Date:	
	Rainb	ow Write	•	
	and draw your box to help you.	favorite thing	about rainbows.	Us
	,			
energy	light waves	scientists	wavelength	



Name: _											Do	ate:				
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2			_	_		_	_	_	_	_	_		_	_	_	
			_	_	_	_	_	_		_	_	_	_	_	_	
			_	_	_	_	_	_	_	_	_	_	_	_	_	



Light Makes a Rainbow Quiz

Directions: Read each question. Choose the best answer. Fill in the bubble for the answer you have chosen.

- 1 What is the main idea of the book?
 - A Purple is the shortest wavelength.
 - B Rainbows are pretty.
 - C Light goes through water to make a rainbow.
 - D Every time it rains, it makes a rainbow.
- What can you conclude from the text?
 - A People can run faster than light moves.
 - B Roy G. Biv makes rainbows.
 - C The colors of a rainbow change.
 - D You need light and water to make a rainbow.

- Which detail supports the main idea?
 - A Water drops bend light.
 - B All the colors have the same wavelength.
 - C The colors of the rainbow can be in different orders.
 - (D) You need light to see.
- 4 Read the sentence below. Choose the best word to fill in the blank.

Light is a kind of _____.

- (A) color
- B) dark
- C rain
- D energy



Rainbow Data STERM

Directions: Marco recorded days he saw rainbows for a month. Use his calendar to answer the questions.

SUN	MON	TUE	WED	THU	FRI	SAT	
			0	2	3	4	1
6	6	0	8	9	0	0	
12	B	10	1	16	Ð	18	= I rainbo
19	20	3	2	23	24	25	_
26	27	23	29	30	3		-

)	On which day of the week did Marco see rainbows most often?
)	On which day of the week did Marco not see any rainbows?
	How do you know?



Learning Objectives

Students will:

- use text features to locate facts and information in the book.
- recall information from the text and experiences to answer a question.
- identify patterns of the moon and Earth.

Standards

- Reading: Know and use various text features to locate key facts or information in a text.
- Writing: With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question.
- **Content:** Use observations of the sun, moon, and stars to describe patterns that can be predicted.
- Language: Communicate information, ideas, and concepts necessary for academic success in the content area of Science.

Lesson Timeline

Day /

Task

Introductory and Lab Activities (page 172)

Summary of Student Learning Activities

Observe how the moon's shadow creates the phases that we see.

Day 2

Task

Before Reading (page 173)

Summary of Student Learning Activities

Preview the book and hunt for text features.

Day 3

Task

During Reading (page 174)

Summary of Student Learning Activities

Use text features to locate information and answer a question using information from the book.

Day 4

Task

After Reading (page 175)

Summary of Student Learning Activities

Practice using the index to find information in the book.

Day 5

Task

Activity from the Book (page 175) and Assessments (pages 180–181)

Summary of Student Learning Activities

Create a chart listing the phases of the moon that they observed and take the assessments.

- copies of the Lab Observations activity sheet (page 176)
- paper
- coloring supplies
- ball
- lamp

Dav

Observe how the moon's shadow creates the phases that we see.

Introductory Activity

Engage

- Have students close their eyes and imagine that they are outside at night. Ask them what they see. When students mention the moon, ask everyone to picture in their heads what the moon looks like.
- Have students open their eyes and draw a picture of the moon on a sheet of paper.

Have students share their drawings. Remind them of the other shapes the moon may have, such as a circle, a partial circle, or a crescent. Explain that the moon looks different each night and they will learn why.

Lab Activity

Explore & Explain

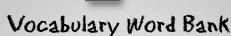
- Before the activity, darken the room. Place a lamp without a shade in the center of the room. You may wish to do this activity as a whole class or place students in small groups, providing space to conduct the observations. Distribute a playground ball to each group. Tell students to pretend that the ball is the moon, the lamp is the sun, and they are Earth.
- 2. Instruct students to hold the ball slightly above their heads, if necessary, to keep their own shadows from interfering. Have them spin slowly in a circle while holding the ball. Ask them to discuss the shapes that the shadows make on the ball.
- Ask questions to guide students to the idea that only the part of the moon that is lit by the sun can be seen.
 - What shadows do you see on the ball?

- > What do you notice about the shapes the shadows make?
- > How are the moon and the ball the same and different?
- > What happens to the shadow as you sbin?
- 4. Bring the class together for instruction. Ask students to share their understanding of why the moon looks different. Explain how the moon's shadow creates the different shapes, or phases, that we see. Clarify any misconceptions students may have about the moon.
- **5** Distribute copies of the Lab Observations activity sheet (page 176) to students. Read the directions aloud. Have students draw the ball's shadows from four different locations.

- Earth and Moon books
- copies of the Hunting for Text Features activity sheet (page 177)
- · index cards
- · chart paper



Preview the book and hunt for text features.



- axis
- phases
- · full moon
- planet
- · new moon
- rotates

Before Reading

Elaborate

- Write the vocabulary words on index cards. Discuss the words and explain their definitions. Then, place students in small groups and distribute a set of index cards to each group.
- 2. Ask groups to sort the words on the cards in a way that makes sense. After groups have finished, have each group explain how they arranged the words.
- 3. Display the Earth and Moon book for students and read the title aloud. Explain that nonfiction books use text features to help readers understand the text and find information.
- 4. Create a list of text features on chart paper. Be sure to list captions, headings, sidebars, bold words, glossary, index, and table of contents. Explain the purpose of each. Have students help you identify examples of each text feature in the book.

 Note: Save the list of text features to use later in the lesson.
 - Pull below-level learners and English language learners into a group. Have them create a visual glossary for the text features by drawing a small sketch or illustration of each text feature and labeling it.
- Distribute the Earth and Moon books and copies of the Hunting for Text Features activity sheet (page 177) to students. Read the directions aloud. Have students work in small groups to complete a text features scavenger hunt, noting the page numbers where they find each feature.

ARTH and SPACE Earth and Moon (cont.)

Materials

- Earth and Moon books
- · copies of the Earth and Moon Words and A Day on Earth activity sheets (pages 178-179)



Use text features to locate information and answer a question using information from the book.

During Reading

Elaborate

- Distribute the Earth and Moon books to students. Conduct a choral reading for the first reading of the book. Point out the text features on the pages as you read. Then, discuss how and why authors include text features and how they help readers locate information in a text.
- 2. Ask students what they know about a glossary. Model how to use the glossary. Think aloud to explain how a glossary can help a reader determine the meaning of unknown words.
 - > You may choose to display the Interactiv-eBook for a more digitally enhanced reading experience.
- 3. Have students read in pairs for the second reading. Instruct students to take turns reading pages aloud with their partners. Ask them to discuss which text features in the book would be the most helpful when trying to locate information.

- 4. Distribute copies of the Earth and Moon Words activity sheet (page 178) to students. Read the directions aloud. Have pairs use the glossary to complete the activity sheet together.
 - > For **below-level learners** and English language learners, you may choose to play the audio recording as students follow along to serve as a model of fluent reading. This may be done in small groups or at a listening station. The recordings will help struggling readers practice fluency and aid in comprehension.
- **5** Distribute copies of the A Day on Earth activity sheet (page 179) to students. Read the directions aloud. Lead the class in examining and analyzing the text features on page 7 of the book. Have students write what they learned from each text feature.
 - > Have above-level learners create another text feature that would help readers understand the text on page 7.

- Earth and Moon books
- copies of the Earth and Moon Quiz and Moon Data activity sheets (pages 180–181)



Practice using the index to find information in the book. Create a chart listing the phases of the moon that they observed and take the assessments.

After Reading

Elaborate & Evaluate

- Review the meanings of the vocabulary words with students. Then, use the words in sentences. Use some of the words correctly, and some of them incorrectly. Have students respond by either showing you a thumbs up if they think you used the word correctly, or a thumbs down if you used the word incorrectly.
- 2. Distribute the Earth and Moon books to students. Select one word from the index on page 23. Explain to students that the index shows where to find topics in the book, whereas the glossary gives the meanings of words. Model how to find the page on which the word appears and find it in the text.
- 3. Hold index races where a student calls out a topic and the remaining students race to find it in the text using the index. Discuss each topic. Ask students to explain how the index helped them find the topics more quickly than if they searched page by page.

Activity from the Book

Read the Your Turn! prompt aloud from page 24 of the Earth and Moon book. Have students work in pairs to discuss the phases of the moon, and create a chart listing all the phases they have seen.

- A short posttest, Earth and Moon Quiz (page 180), is provided to assess student learning from the book.
- (page 181), is provided to assess students' understanding of how to analyze scientific data. Read the directions aloud. Point to the calendar and read the labels for the days of the week. Explain that the data is on a calendar with days and dates listed for the month of April. Explain to students that the chart shows what the moon looked like each of the days.

 Note: You may need to preteach reading calendars prior to giving this assessment.

STEM

The Interactiv-eBook activities may be used as a form of assessment (optional).



Name:	Date:		
Lab Ob	servations		
Directions: Draw a ball's shadow at four different locations. Then, answer the question below.			
1	3		
2	4		
What did you learn about why th	e moon looks different each night?		



Name:	Date:

Hunting for Text Features

Directions: Write the page number where you find each text feature in the book.

Text Feature	Page
table of contents	
heading	
caption	
sidebar	
bold print	
glossary	
index	



Name:					Date:	
		Ear	th and M	loon W	ords	
		: Read the w definition.	ords below. V	Vrite each	word belo	w the
	axis	full moon	new moon	phases	planet	rotates
0	the ei	ght shapes o	f the lit side of	the moon		
2	a larg	e, round obje	ect in space th	at travels	around a	star
3	the m	oon when it l	ooks complete	ely dark		
4	turns o	or spins				
6	the im	aginary line	that Earth spi	ns around		
6	the m	oon when it l	ooks like a cor	mplete briç	ght circle	



A Day on Earth

Directions: Write what you learned from each text feature on page 7.

Text Feature	What I Learned
picture	
sidebar	
caption	

Name:	Date:

Earth and Moon Quiz

Directions: Read each question. Choose the best answer. Fill in the bubble for the answer you have chosen.

- 1 What does the word *rotates* mean?
 - (A) wiggles around
 - B stays still
 - C turns or spins
 - (D) becomes a star

- **3** What happens as Earth rotates?
 - A Night turns into day and day turns into night.
 - B It is daytime everywhere on Earth.
 - C The moon orbits the sun.
 - D The sun rotates, too.
- Which text feature helps you find the page on which a word appears?
 - (A) glossary
 - (B) caption
 - (C) chart
 - (D) index

Read the sentence below.
Choose the best word to fill in the blank.

It takes 24 _____ for Earth to make one full turn.

- (A) seconds
- B hours
- C days
- D years



Name: D

Moon Data STEM

Directions: Joel and Rosie looked at the moon and drew what it looked like each night of the month. Use the data from their calendar to answer the questions below.

SUN	MON	TUE	WED	THU	FRI	SAT
			1	2	3	4
5	6	7	8	9 (10 (11 (
12	13	14)	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

0	What was the date of the new moon?				
2	How many days were between the new moon and the full moon?				
3	On which day were Joel and Rosie unable to see the moon? Draw a picture of what the moon would have looked like if they had				
	been able to see it.				