

Reading levels: Grades K–1

Subject: Science

Materials

- book for each student
- chalkboard or dry-erase board
- magnetic letters
- pencils, crayons, or markers
- paper
- *Let's Explore the Stars* Activity reproducible (optional)
- sticky notes (optional)

Reading Standards

- **CCSS ELA-Literacy.RI.1.6:** Distinguish between information provided by pictures or other illustrations and information provided by the words in a text.
- **CCSS ELA-Literacy.RI.1.7:** Use the illustrations and details in a text to describe its key ideas.

Targeted Reading Strategy

Visualize to understand the text.

Academic vocabulary: constellations, Earth, galaxy, gas, outer space, telescopes, universe

High-frequency words: and, because, like, look, night, off, see, there, they, why

Before Reading

Build Background Knowledge

- Have students close their eyes and make a mental picture in their mind of something familiar to them. It can be their classroom; their favorite place to visit; something outside, like a playground or park; their home; their pet; their mom or dad; their teacher; or anything else they want. Explain to the children that you want them to really visualize every little thing about this person, object, or place they are thinking of. Then have them open their eyes and describe what they pictured to a partner. Have them tell each detail, be descriptive, and allow their partner to make a guess about what they were describing. Allow the person who visualized this to give extra descriptive clues, if necessary, to help the partner guess the place, person, or object.
- Have each person take a turn as the visualizer and guesser.
- Hold the book up, and ask students if they know what the front of the book is called (the front cover), and then have them point to the back cover. Ask the students if they can tell you what the large words on the front cover of the book are (the title). Give time for a response. Then read the title to the students. Introduce the book *Let's Explore the Stars* by showing the students the cover, reading the title, and looking at the picture. Ask students if they know what we call the person who writes the words in a book (the author). Wait for a response. Explain that sometimes a book can have the same author and illustrator (the person who takes or draws the pictures) as in this book. Read the name of the author and illustrator. Explain that many books have an author and an illustrator and that it is very important to know who wrote the words and who took the photos or drew the pictures.
- Show students the title page. Discuss any important information on the page, such as the title of the book, author's name, and so on.
- Preview the table of contents. Read the section titles together. Ask the students what they think each section will be about after reading each of the section titles. Explain that this is an important text feature found in nonfiction books. It tells the reader where he or she can find important information about different topics in the book.
- Take a book walk with the students. Have students find the picture glossary and the index with you, and explain that these are also important text features that can be found in nonfiction books. Turn to those pages, and show the students how the table of contents helped you find them.

- During the book walk, introduce new vocabulary and model ways to figure out the words. Remind students that as they read, they need to use the pictures and the context clues to help them figure out tricky and unfamiliar words. The context clues, the words around the unknown word, help us figure out the word we don't know. We need to read before and after it. Sometimes we need to read more than one sentence for clues. Model reading a page out loud for the students using this reading strategy. We also need to ask questions and use prior knowledge to figure out these words. This helps students begin to use self-monitoring strategies when they are confused about something instead of continuing to read and lose meaning.

Skill Introduction

- Explain to students that when readers are actively reading, they are engaged in the book and they make pictures in their minds. This is called visualizing. Discuss that the photos in a book can also provide important information to add to the visualizations that the reader makes.
 - Then explain to the class how visualizing helps readers better understand the author's points because it allows them to get inside the author's head and make connections with the text. It also puts them in the place, the setting, or takes them to imaginary lands and connects them with character's feelings, and more, depending on what genre they are reading.
 - Read pages 4–9 aloud to the class. Have the students close their eyes while doing so, and ask them to visualize. When finished, give them time to share and discuss what they pictured in their minds (nighttime, constellations, sparkling stars, twinkling stars, shooting stars, bright stars, glowing stars, shining stars, dark sky, moon, and clouds).

Think-aloud: *I just read a few pages about the stars to you. We have been reading lots of books about the solar system. We all know that we live on planet Earth and that our solar system is made up of planets and stars and the moon. Today we are reading about the stars. Does anyone know what is the largest star in the solar system? When I read about stars glowing and how they give off light and heat and how there are billions of stars in the sky, I used my prior knowledge of the solar system to visualize the stars in the sky. I automatically pictured beautiful sparkling and shining stars on a dark night sky. Those were good clues for me, and they helped me make a great mental picture. Did anyone else think about those things? Did you see how making visualizations help you to better understand the meaning of the text?*

- Tell students that as they read, their job is to stop after each page and close their eyes to visualize what the author has just explained. Have them make a mental picture of the text to better understand the meaning.

During Reading

Check for Understanding

- Guide students as they read by asking them to read and stop on page 14 (you may want to place a sticky note there). Fast finishers can reread until everyone is finished. Students should be reading quietly to themselves so they can read at their own pace.
- Remind them to stop at several points during reading to visualize as they read. Model for them how to create images in their minds. You may want to make a list of ideas on the board that they can think about.
- Model targeted skill: visualizing to understand

Think-aloud: *As I read, I pause often and close my eyes while I make a mental picture of the author's words. This is called visualizing. It helps me understand what I am reading and connect the text with pictures in my mind. I use prior knowledge to help me do this, and I also use the pictures from the book.*

- Have students finish reading the rest of the book. Remind them to use what they already know to help understand what they read. Have them think about each section title and the details to follow.
 - Have students place a sticky note next to any word they cannot read or understand. This can be discussed after the book is read. They can write the word on their sticky note, and they can include the page number. This can also be discussed as a group or after individual reading.

After Reading

Response to Text

- Have students share some of the visualizations they came up with as they finish the book. Have them work in small groups and tell one another how visualizing helped them better understand the text.

Think-aloud: *As I read, I use the text and illustrations to create mental pictures. This is a key tool to help me understand what I am reading and become a better reader. For example, on page 18 of the book, the author talked about how some constellations look like people and said that Orion is the name of a constellation that looks like a hunter with a shield. I was able to connect my prior knowledge about what I know about what hunters and shields look like and was able to make mental pictures in my mind. Although the constellations will look different because it is more like an outline than an actual detailed drawing of these objects, I could still visualize what they look like. This helped me better understand the text.*

Word Work

Alphabetical Order with High-Frequency Words, Academic Vocabulary Words, or Both

- Have students use lined paper or dry-erase boards
- Use words given at the beginning of the lesson from the high-frequency list, academic vocabulary list, or both.
- Write the words in alphabetical order.
- Explain to students that if more than one word begins with the same letter, they will need to look at the second letter. The letter that is closest to the beginning of the alphabet is the letter that will go next in alphabetical order.
- Explain the purpose of alphabetical order. Why do we need it? Have students generate a list of times when it is useful to use ABC order.

Extension Activity: Science Constellation Activity

- Research a constellation that you like.
- Learn about it, and make a concept web about it.
- Write facts about the constellation.
- Then draw a picture using stars to show your constellation in the nighttime sky.

Critical Thinking with Bumba Books

Foster higher-order thinking skills by embedding Bumba Books' critical thinking questions into your reading instruction. Use them to spark discussion, and encourage your emergent readers to be actively engaged in informational text!



Name: _____

Let's Explore the Stars Activity

Draw a picture to show a part in the book where you stopped to visualize in order to help you understand what you just read.

Write at least three complete sentences to explain your drawing and the scene it represents from the book. _____

