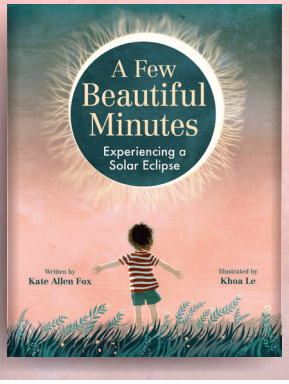
TEACHING TIPS

A FEW BEAUTIFUL MINUTES

EXPERIENCING A SOLAR ECLIPSE

Written by **Kate Allen Fox** • Illustrated by **Khoa Le**



9780316416924

WHAT IS AN ECLIPSE?

Show a video of a solar eclipse. Encourage students to ask questions, make models, and offer hypotheses about what is happening. Then, engage students in an experiment designed to show why there are solar eclipses. As background, a solar eclipse occurs when the moon passes between Earth and the sun. This can fully or partially block the sun's light from the perspective of someone on Earth. Since Earth's orbit around the sun and the moon's orbit around Earth are not perfectly circular, the distances between them change during their orbits. During a total eclipse, the distances are such that the moon covers the sun. Students can try to reproduce this phenomenon by using a light to represent the sun and different sized balls to represent Earth and moon. Students can work in groups to show the orbit of Earth and the moon, adjusting their distance until they can arrange themselves in a way that the moon blocks the sun. Encourage students to revise their predictions and models after this experiment.

ANIMAL AND PLANT BEHAVIOR DURING AN ECLIPSE

Animals and plants are affected by an eclipse as well. Encourage students to research how animals and plants react during an eclipse, and then create a short skit showing a conversation between a scientist and a farmer. The farmer can explain what they saw, and the scientist can share why this might be happening. Students could use some of the following observations:

- A farmer noticed the chickens were behaving like they do in the evening even though it was only 1:00 in the afternoon.
- Insects and birds started chirping noisily, but during the eclipse it was silent.
- Porcupines and deer emerged from the forest to search for food.
- Morning glories and hibiscus flowers closed their petals.

INTERVIEW

Astronomers can predict the occurrence of eclipses and other celestial phenomena using mathematical equations and models, but many people think they mainly just look through telescopes. Engage students in an interview activity to help them learn more about careers in astronomy or related to astronomy. Contacting local universities, planetariums, or even reaching out to NASA are great ways to find experts to interview. Students can develop questions to ask during the interview and then work on speaking and listening skills as they conduct the interview.

ECLIPSE MYTHS AND STORIES

Read myths and stories from different cultures to learn about how the natural phenomenon of an eclipse is explained. Create a chart showing the different ways the eclipse is explained and compare and contrast the myths and stories. For example, Navajo have a story about a celestial dog. This "sky wolf" usually chases the sun and moon, but during the eclipse it catches and devours the sun for a short period of time. In ancient China, they believed a celestial dragon consumed the sun. There are also stories and myths from Vietnamese, Greek, and Mayan cultures. Read a variety and discuss how they are the same and different.

CELEBRATING AN ECLIPSE AROUND THE WORLD

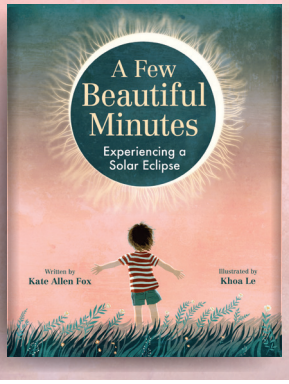
Just as there are many different stories from around the world to explain an eclipse, there are also many different ways an eclipse is celebrated or acknowledged. Read about these different traditions and consider making a display to show the various reactions and responses. Some cultures use drums to make noise, others have fireworks displays, and others host community gatherings. There are many ways people from different places respond to an eclipse.

TEACHING TIPS

A FEW BEAUTIFUL MINUTES

EXPERIENCING A SOLAR ECLIPSE

Written by **Kate Allen Fox** • Illustrated by **Khoa Le**



ECLIPSE EXPRESSIVE ART

Give students the opportunity to express their vision of an eclipse using a variety of materials. Students can paint, draw, use clay, or any other materials to create their own artistic version of an eclipse. Begin by discussing the feeling they want to share and explain that this art project does not have to be a painting of an eclipse. It can be an expression that shows how people might feel during an eclipse. For example, it could be art that expresses a feeling of togetherness like in *A Few Beautiful Minutes*. Others may want to show lightness and darkness or maybe their own unique interpretation of an eclipse. Students may even want to move beyond a visual representation and express themselves in song or dance. Host an exhibition and share the eclipse creations with other classes or the community.

WHAT ELSE CAN YOU SEE?

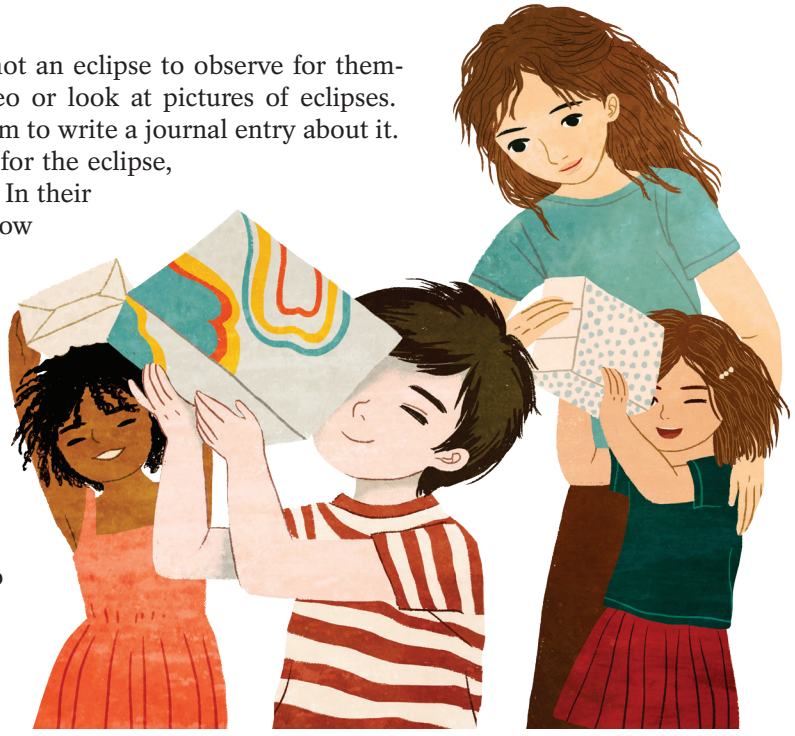
During a solar eclipse, it becomes so dark that you can see the stars. If there is an upcoming eclipse, research the stars and planets in the sky that should be visible in your area during the eclipse. As a group project, have students learn more about those planets and stars and create a poster, presentation, or information sheet to share what they learned. This guide to the night sky could even be distributed to other classrooms.

SOLAR SAFETY

The book tells how to make a sun viewer and warns readers not to look directly at the sun. In addition to making the viewer, have students create a brochure or video to teach others about solar safety. Students may want to include other facts about the sun or recommendations for solar safety when there is not an eclipse.

ECLIPSE JOURNAL

Observing an eclipse is a rare experience, but even if there is not an eclipse to observe for themselves, students can imagine what it would be like. Show video or look at pictures of eclipses. Then, have students pretend they are in the moment and ask them to write a journal entry about it. Encourage them to consider how they would feel while waiting for the eclipse, what it would be like during it, and how they might feel after it. In their entry, they can describe who is with them, where they are, and how they are feeling.



LITERARY DEVICES

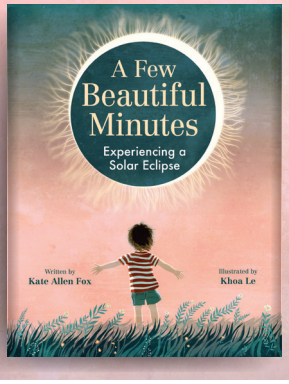
There are many literary devices used throughout this book to create a feeling and help the reader feel like they are part of a beautiful moment. Explicitly teach personification, alliteration, metaphors, and other literary devices that may be grade appropriate. Give many examples. Then, create a list of different kinds of literary devices. Divide students into small groups and have them search for examples within the book. This could also be done as a whole class.

TEACHING TIPS

A FEW BEAUTIFUL MINUTES

EXPERIENCING A SOLAR ECLIPSE

Written by **Kate Allen Fox** • Illustrated by **Khoa Le**



IMAGERY POEMS

There are many descriptive words in this text. As a class, identify the words that really helped them picture each scene. Make a list of their favorite words from the story. Then, have students use those words (or others they might want to use) to write a poem about an eclipse (or another natural phenomenon).

WHAT'S YOUR STORY?

This story is about a shared experience, a beautiful moment in time. Have students brainstorm a list of experiences they shared with others. It might be a class trip, a family vacation, a walk with a friend, or any other shared event. Ask students to choose one of the experiences from their list and write about it. Encourage them to use a narrative style, helping the reader feel like they are part of that same moment.

PERSUASIVE WRITING

Have students imagine the following scenario and write a persuasive letter in response:

There is going to be an eclipse, but your friends want to play video games instead of watching the eclipse. Use your persuasive writing skills to convince them that they should watch the eclipse with you. Be sure to include clear reasons and make sure to explain how you will protect your eyes from the sun.

VOCABULARY

Pre-teach some of the vocabulary words and then help students understand how to use them in their own writing. Some vocabulary words to highlight include: *vast*, *vibrant*, *silhouette*, *striving (strive)*, *eerie*, *plummet*, *corona*, and *captivated (captivate)*. Teach the meaning with examples, and then call attention to how they are used in the story. Next, encourage students to come up with their own sentences. For example, they might say: "The sky is vast. Something else that is vast is the park near my house. There is so much wide-open space."

ACTIVITIES TO CONNECT TO FOUNDATIONAL SKILLS:

While this picture book is perfect for reading aloud, there are also opportunities for some foundational skill work:

For students at the spelling-pattern phase, words with inflectional endings (ed, ing, s) can be highlighted and students can practice covering the ending, decoding the root word, and then adding the ending. Some examples from the story include: *gliding*, *sliding*, *slipping*, *glowing*, *shifting*, *striving*, *shining*, *slimmer*, *dimmer*, and *brighter*.

For students at the polysyllabic or morphemic stage, they can apply their strategies to read words with multiple syllables by first breaking them into syllables and then reading the whole word. Some examples from the story include: *illusion*, *universe*, *performance*, *anticipation*, *panorama*, and *reemerges*.

These Teaching Tips were created by Dr. Jennifer McMahon, Education Consultant.