	LEARN ABOUT THE MYTHOLOGY OF ECLIPSES	CREATE A PINHOLE PROJECTOR
ACTIVITY	Ask students to share how they would feel if they saw an eclipse and didn't know what was happening. Explain that, in the days before modern science, many cultures created mythology to explain eclipses. Split the class into groups, and direct them to background information about eclipse mythology from the National Environmental Education Association. Assign each group one of the following countries/nations from the handout, and invite them to read and summarize the eclipse myth from their country or nation: Ancient China, Ancient Egypt, Germania, or The Pomo Tribe. Invite groups to pair up with another group and present the myth they summarized. Then, ask each new larger group to identify one similarity and one difference between "their" myth and the myth they learned about from the other group. Finally, challenge the class to draw at least one conclusion about eclipse mythology.	Remind students never to look directly at the Sun during an eclipse without protective eye gear. That's because looking directly at the Sun can cause eye damage. If students don't want to buy special eclipse glasses, they can make a pinhole projector! Here's how: 1. Cut a small rectangular hole at one end of the box. 2. Cut a piece of aluminum foil a little larger than the rectangular hole. (Make sure the foil is flat and not crinkly) 3. Tape the foil over the rectangular hole in the box. 4. Use the push pin or thumb tack to poke a tiny hole in the center of the foil. 5. Tape the white paper on the inside of the other end of the box. 6. On the day of the eclipse, stand with your back toward the Sun. Place the box over your head using the open end or by cutting a small hole. Face the pinhole towards the Sun. Do not look at the Sun through the pinhole. 7. Adjust your position until you see a small projection, a negative image, of the eclipsed Sun on the paper inside the box.
EXTEND	Invite students to create their own mythology about eclipses.	Review other tips for safely watching an eclipse.

	EXPLORE SOLAR ECLIPSE PATHS	MODEL A SOLAR ECLIPSE
ACTIVITY	Ask students to select a city in the continental US and write it on a piece of paper. Display the Eclipse Map for April 8, 2024, and explain that the path of totality is the track on Earth's surface where a total solar eclipse is visible. Bring up a city on the map and ask students to share what they think the percentage represents. Clarify that the percentage represents how much of the Sun is covered by the Moon in that location. Have students draw a circle on a sticky note to model the sun and then shade in the percentage from the city they selected. Invite students to place their sticky notes on a US map and discuss any trends they see. Students should notice that the cities further away from the path of totality will have lower Sun coverage. What is the relationship between Earth, our Sun, and Moon? How does this explain why people across the country will see different views? Tell students this is because only a narrow strip across the US will be in the umbra, the part of the Moon's shadow with the Sun completely covered.	Explore the interactions between the Sun, Moon, and Earth during a solar eclipse to explain how eclipses occur. Divide students into groups of 3-4, and provide each group with 3 balls to represent the Sun, Moon, and Earth. Have students place the sun at the center, the Earth orbiting around it, and the Moon orbiting around the Earth. Encourage students to experiment with the positions, orientations, and rotations of the Earth and Moon to simulate different phases of the Moon and eclipse conditions. Next, distribute flashlights to represent the Sun. Have students observe how the shadow of the Moon interacts with the Earth. Guide students through simulations of partial, total, and annular eclipses by adjusting the positions and distances of the Earth, Moon, and light source. Encourage students to make observations and record data about the size, shape, and duration of the shadow cast by the Moon during each type of eclipse. Summarize by having students use their models to explain why a total solar eclipse is rarely seen in the US. What factors have to come together for us to be able to view one from our location?
EXTEND	Compare this year's path with 2017.	Find other things to observe in the sky.