



Solar Eclipse Activity: Eclipse Myths Around the World

Description

- Grades: 4-6
- 40-55 minutes
- All seasons

Materials Needed

- Solar Eclipse Myths handout (attached)
- Solar Eclipse Themes handout
- Extra writing utensils

Summary

Students will learn about the unique stories people in ancient cultures created to explain the phenomena of a solar eclipse, and then write their own myths based on those stories.

Learning Objectives

- Compare several eclipse myths and explore common themes.
- Understand how these myths relate to our current understanding of natural phenomena.
- Promote creativity, empathy, and an understanding of cause-and-effect relationships.

Invitation (5-10 mins)

- Review what a total solar eclipse is and what students should expect during the eclipse.
 Write these items on the board where students can see:
 - The moon slowly covers the sun.
 - The sky gets dark.
 - When the sun is fully covered (totality), we can see the corona.
 - Animals may behave strangely.





- Ask students to share how they would feel if they saw an eclipse and didn't know what was happening.
- Describe how, in the days before modern science could show exactly what was happening during a solar eclipse, many different cultures created their own mythology around eclipses to explain them.
- Tell the students that they will read some of these mythological stories and then create their own.

Task 1: Exploring Eclipse Mythology (15-20 mins)

- Split the class into small groups.
- Pass out Eclipse Myths and Eclipse Themes handouts.
- Explain that, even though the myths you've given them came from very different cultures, it's possible to find a few common themes between them (the sun is being eaten, the sun and moon are in love, etc.)
- Explain that each group will have time to read an eclipse myth with their group, discuss how it describes what happens during a solar eclipse, and match it to at least one of the themes on their handouts.
- Let them know that one person from each group will be asked to share their myth with the rest of the class after their group time is over.
- Give students about 10 minutes for group reading and discussion, adding or subtracting time as needed.
- After small group discussions are finished, ask one member from each group to give a brief summary of their myth with the rest of the class.
- Help the class identify some of the themes involved, explaining the logic behind each choice.
- Continue asking groups to share until each myth has at least one theme matched to it.

Task 2: Writing Your Own Eclipse Myth (10-15 mins)

 Ask the students to think about all the myths they've just heard. Which ones did they like the most? The least?





- Ask the students to try writing their own eclipse myth, either by themselves or with a
 partner. It could be inspired by the myths they heard today, or a completely new myth.
- Give the students about 10 minutes to write their myths.
- Once time is up, check to see if the students need more time to finish. If not, encourage the students to share their eclipse myths with either the whole class or in smaller groups.

Conclusion: Reflection (10 mins)

- Reassure students that, although a lot of people had a very negative view of eclipses in the past, now we understand them as very natural and awe-inspiring events.
- Stress that the only way an eclipse can be harmful is if you look directly at the sun before or after totality without wearing special eclipse viewing glasses. NASA produced a guide covering common eclipse misconceptions which you can view <u>here</u>.
- Wrap up the lesson by asking if students have any remaining questions about eclipse mythology.

Vocabulary

- Mythology
- Culture
- Solar Eclipse
- Totality
- Corona

Learning Standards

- Ohio's Learning Standards and Model Curriculum for Science
- Next Generation Science Standards: MS-ESS1-1. Earth's Place in the Universe





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Solar Eclipse Themes

The myth I read with my group came from ______

Match the main theme of each eclipse myth to the culture it came from:

Culture	Theme
Ancient China	1) The sun is being eaten.
Ancient Egypt Germania	2) Then sun and the moon are fighting.
Pomo Tribe	3) The sun and the moon are in love.

My Eclipse Myth:



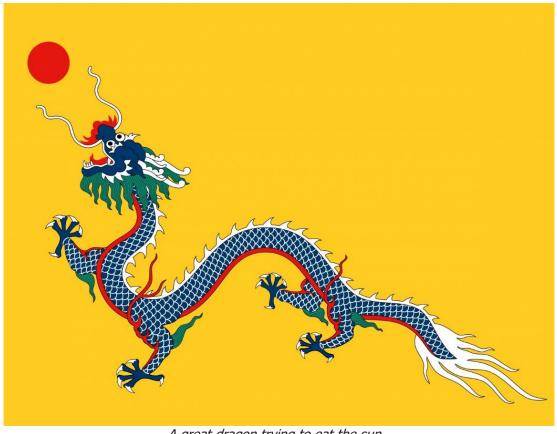


Solar Eclipse Myths

Ancient China

According to ancient Chinese myth, there were dragons living in the sky eating stars and clouds. But one dragon was so greedy and hungry that he would try to eat the sun.

Usually, the sun is too quick for the dragon to catch, but he occasionally manages to take little bites of the sun. However, when the dragon gets too hungry, he's able to move fast enough to eat the whole sun in one bite, blocking out its light completely. Ancient Chinese people even referred to eclipses as *shi*, which means "to eat."



A great dragon trying to eat the sun. Source: Public Domain

To keep the dragon from swallowing the sun and losing it forever, people decided they needed to make a bunch of noise to scare off the dragon. They would start shouting and banging on pots and pans, and later they started banging on drums, setting off firecrackers—even firing cannons!





If the people managed to make enough noise, they would scare the dragon so much he would cough out the sun and return it to the sky.

Ancient Egypt

The ancient Egyptians worshipped the god Ra. Ra was the falcon-headed god of the sun, and every day he would travel across the sky with the sun in his boat. When the sun went down at night, it was because Ra was traveling through the underworld, shining light on the dead as he made his way back to the east to start a new day.

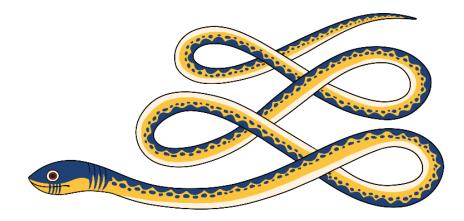


The sun god Ra in his boat. Source: Public Domain

Ra made this trip over and over, but it wasn't without its challenges. Apep (AH-pep), Ra's worst enemy, was a giant serpent god of chaos and darkness that lived in the Nile River. Apep was constantly trying to catch up to Ra so he could eat him.







Apep, enemy of Ra. Source: Eternal Space via Wikimedia Commons

Usually Ra was too fast for Apep, but sometimes Apep was able to catch Ra and swallow him and his boat whole. When this happened, the sun would go dark and disappear as if it was night in the middle of the day.

Fortunately, Ra had powerful claws and a strong beak, so he always managed to fight his way out of Apep's stomach, throw him back into the Nile, and resume his journey across the sky.

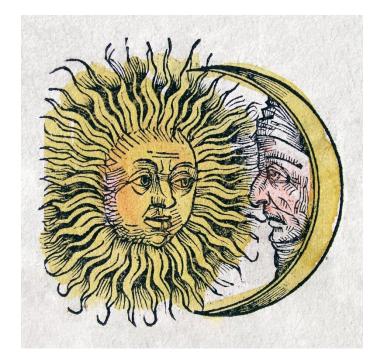
Germania

Germanic people believed that the Sun was a woman, the Moon was a man, and they were married. Although they loved each other, they had very different personalities. The Sun was fiery and passionate while the Moon was cold and sleepy, and they were constantly fighting because of this.

The Sun and Moon decided to make a bet that whoever woke up first would rule the day and whoever slept in would rule the night. They both fell asleep, but the Sun was so mad at the Moon she couldn't sleep, so she decided to get up early. This meant the day was hers and the night was his.







The Sun and the Moon. Source: Public Domain

The Sun swore she would never spend another night with the Moon, but soon she began to miss him, and the Moon missed her, too. They decided to get back together, and when they embraced, the Moon blocked out the Sun. But before long, they started to fight again, and the Sun and Moon went their separate ways, though they still come back occasionally.

The Pomo Tribe

The Pomo Tribe are a group of Native Americans from Northern California. According to tribal legend, there was a huge Bear who lived in the sky and walked along the Milky Way.

One day as the Bear was walking in the sky, it bumped into the Sun, who was walking the opposite way. The Sun told the Bear to move out of his way, but the Bear insisted the Sun was the one who should move. Because both were stubborn, they yelled at each other for a while, but neither one would move.







The great bear constellation Ursa Major, also known as the Big Dipper. Source: Public Domain

Eventually their tempers boiled over and they started to fight. The Bear tackled the Sun and bit him, blocking his rays to the Earth below. Eventually the Sun was able to wrestle free from the Bear, bringing light back to the Earth. After their fight, the Bear and the Sun resumed their walks. But every once in a while, the Bear and the Sun will bump into each other again and have another fight.

The Pomo name for a solar eclipse means "Sun got bit by a bear."





Eclipse Mythology Sources

Littmann, M., & Espenak, F. (2024). *Totality: The Great North American eclipse of 2024*. Oxford University Press.

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Eclipse Myths activity adapted from the Teton Literacy Center's <u>Myth Telling Activity</u>.