

Grade 4 Science
Week of January 11 – January 15

The Moon

Moon Phases



Phases of the Moon: <https://youtu.be/f4ZHdzl6ZWg>

Earth's Moon (often called Luna) orbits the Earth on a 28 day period. During its cycle the Moon experiences different amounts of exposure to the sun. On Earth we see this as different phases of the Moon.

Because it revolves and rotates at the same rate the Moon always keeps the same side toward us. This means that no matter the phase, we only see one part of the moon-any part that is illuminated and viewable from Earth will always be the same side. The Moon does not actually emit its own light. What we see from Earth is light from the sun which hits the Moon and reflects. Occasionally we can see the dark side of the Moon in silhouette. This is actually caused by sunlight which strikes the day side of Earth, reflects to the Moon and partially illuminates it, then reflects back to Earth.

Did you know...

- Dogs and cats are more likely to get injured during a full moon.
- Snakes rarely leave their burrows during a full moon.
- The UV rays of the moonlight react with a protein in scorpions that make them glow in the dark.
- Lions usually hunt at night, but the day after a full moon they hunt during the day.



Solar Eclipse

A solar eclipse occurs when the Moon is directly between the Earth and Sun causing the Moon's shadow to fall on the Earth. If the moon is in the correct phase when it enters the Earth-Sun orbit, an **eclipse** may occur.



What Will Happen During the Solar Eclipse?: <https://youtu.be/Rzb3M8e1AUl>

Total Solar Eclipse

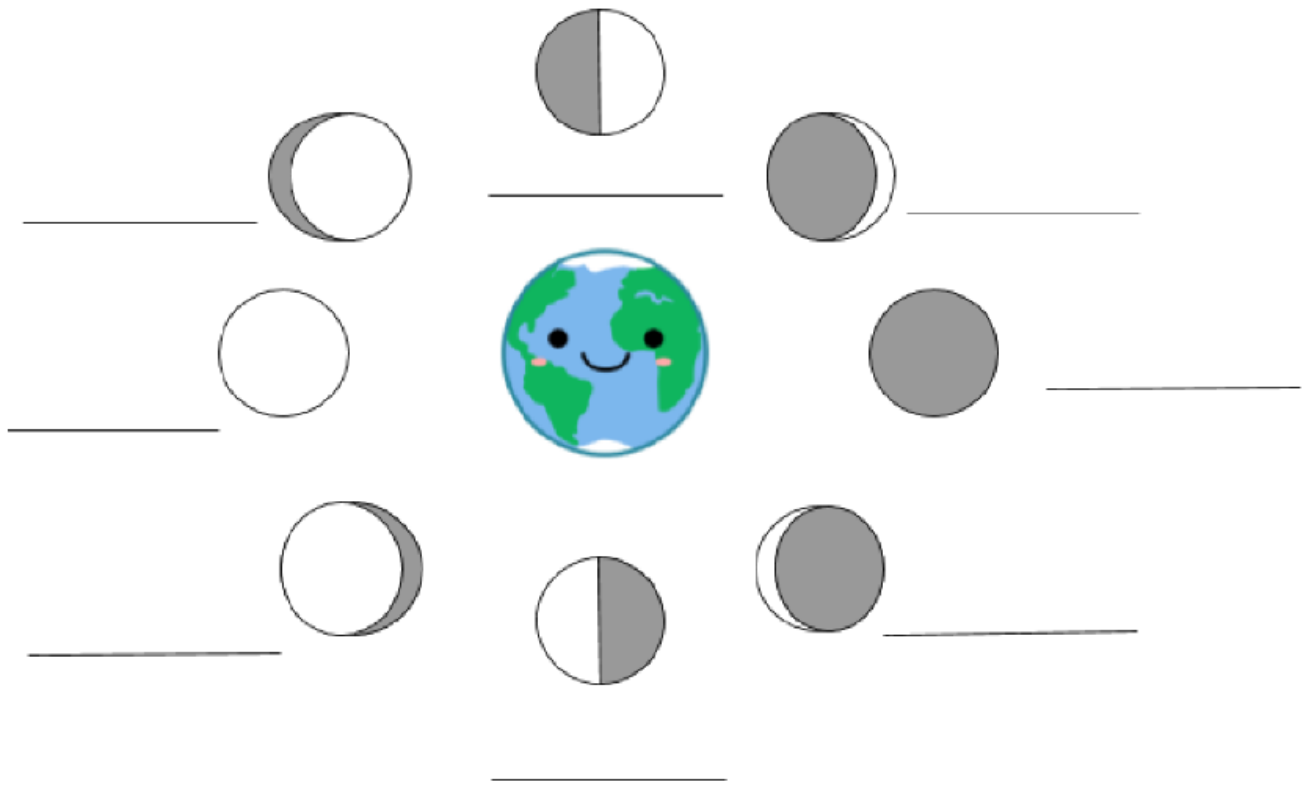
In some places all light from the sun is blocked.



The Moon

1. Earth's moon is called _____.
2. The moon orbits around the Earth in about _____ days.
3. _____ is the first phase of the moons cycle.

4. Fill in the different phases of the moon.



5. Read “did you know” what fact did you learn? If you didn’t learn anything what is a fact you know that isn’t there?

6. A solar eclipse happens when the moon is in between the _____ and _____.

7. What does it look like when there is a solar eclipse?

8. A lunar eclipse happens when Earth’s _____ is on the moon.