

Oreo Moon Phases

New moon, waxing crescent, waning gibbous – what do you see when you look at the moon in the night sky? Discover the phases of the moon using Oreo cookies, and find out why the moon changes shape each night!

TEKS:

- 4.2 Scientific investigation and reasoning. The student uses scientific inquiry methods during laboratory and outdoor investigations.
- 4.3C Represent the natural world using models such as rivers, stream tables, or fossils and identify their limitations, including accuracy and size.
- 5.2 Scientific investigation and reasoning. The student uses scientific methods during laboratory and outdoor investigations.
- 5.3C Represent the natural world using models and identify their limitations.

How To

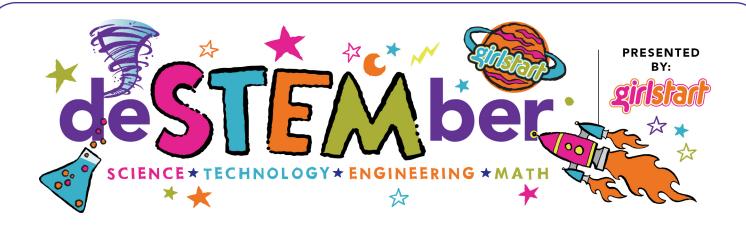
5.6A Identify events that occur on a regular basis such as in daily, weekly, lunar and seasonal cycles.

Materials:

- 4 Oreo cookies
- Crayons
- Knife or spoon
- Life Cycle of the Moon Handout (optional)
- Paper plate

- 1. On the top of the paper plate draw the Sun (color ¼ of the plate edge yellow).
- 2. Draw the Earth (in the middle) of the paper plate making sure to leave room for your Oreo cookies.
- 3. Write the respective moon phases clockwise around the plate: New Moon (starts in middle of the Sun), Waxing Crescent, First Quarter, Waxing Gibbous, Full Moon, Waning Gibbous, Third Quarter, and Waning Crescent.
- 4. Create the phases of the moon with your Oreo cookies by twisting the top off of each cookie and removing the cream filling with a knife or spoon to replicate each moon phase (see picture on page 2)
- 5. Place your Oreo cookie phases next to their respective names around the plate.

lays of STEM FUN!



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Why Does it Work?

The moon reflects the light of the Sun rather than creating its own light. The phases are caused by the moon's revolution around Earth, and the amount of sunlight reflecting off its surface. In sequential order, the phases are: New Moon, Waxing Crescent, First Quarter, Waxing Gibbous, Full Moon, Waning Gibbous, Third Quarter, and Waning Crescent. The phases are a cycle that repeats once a month. As the moon moves between the Earth and the Sun, sunlight hits the back of the moon which faces away from Earth. To us, the moon appears completely dark (New Moon). When the moon revolves so that Earth is between it and the Sun, sunlight hits the side of the moon that is facing Earth. We can see a complete circle of the moon (Full Moon).

Career Connection:

Astronomers study planets, moons, stars, galaxies, meteors, comets and their interactions with each other. They must have an in depth knowledge of physics to understand how forces such as gravity change throughout space. Astronomers work together sharing their knowledge in order to better understand how the universe works at microscopic and macroscopic levels.

Resources: http://spaceplace.nasa.gov/oreo-moon/en/







Life Cycle of the Moon



Draw the phase of the moon you see each night and watch how it changes during the month.



Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday

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