



Oreo Moon Phase Craze

Simple STEM Activities You Can Do at Home

Purpose:	The purpose of this activity is for students to investigate how the moon reflects light from the sun in a way that produces the different phases of the moon.
Standard:	S4E2. Obtain, evaluate, and communicate information to model the effects of the position and motion of the Earth and the moon in relation to the sun as observed from the Earth. b. Develop a model based on observations to describe the repeating pattern of the phases of the moon (new, crescent, quarter, gibbous, and full).
Materials:	8 Oreo Cookies, plastic spoon or popsicle stick, paper plate, markers.
Procedures:	 How To: Collect one Oreo cookie (mini or full size) for each moon phase (8). Carefully twist each Oreo to open it up. Try to keep the frosting on one side but you can always move it if you need to. Use the image below and a spoon or popsicle stick to create each moon phase using the frosting of the Oreos. Label each phase. Draw in the earth and the sun and show rays of light from the sun. Using your diagram, explain why we see different phases of the moon.
Science Behind It:	You can see the moon in the sky because it reflects light from the sun. The revolution of the moon around the earth makes the moon appear as if is changing shape all the time. The part of the moon that faces the sun is always lit up and the part that faces away from the sun is always dark. But, as the moon makes its way around the earth, we see the bright parts of the moon at different angles. The parts we see are often called the "phases" of the moon. The term "waxing" means getting bigger and the "waning" means getting smaller. The terms crescent and gibbous refer to the shape of the moon. Subject
Questions to Ask:	Explain why we can see the moon in the sky.
	 Explain why we see different phases of the moon even though it doesn't actually change shape.