



Solar & Lunar Eclipses Activity for Kids

Solar Eclipse Model DIY

 Duration: **20 min**  Difficulty: **Easy**  Cost: **\$0 to \$10**

Make your own model of a solar eclipse!

Material List

- 1** Meter Stick
- 1** 3.5 cm Clay Ball
- 1** 1 cm Clay Ball
- 3** Toothpicks
- 2** Binder Clips

Instructions

- 1** Attach a binder clip to the 1 cm mark on the meter stick.
- 2** Attach the other binder clip to the 100 cm mark on the meter stick.
- 3** Stick 2 toothpicks into the 3.5 cm clay ball and attach it to one binder clip.
- 4** Stick the last toothpick into the 1 cm clay ball and attach it to the other binder clip.
- 5** Go outside with the model and stand under the sun to see strong shadows.
- 6** Tilt your meter stick so the 3.5 cm clay ball (Earth) faces downward, to model a solar eclipse.
- 7** Flip the meter stick so the 1 cm ball (moon) faces towards the ground, to model a lunar eclipse.

How It Works

A solar eclipse happens when our view of the sun is blocked by the moon. A lunar eclipse happens when the moon passes into the Earth's shadow. When the 3.5 cm clay ball (representing Earth) is facing downward, it is hard to line up the shadow of the smaller moon due to the distance between the two. When you flip the meter stick so that the 1 cm clay ball (moon) is closer to the ground, it is much easier to make an eclipse, since the shadow from the 3.5 cm clay ball (Earth) is much larger.