

Earth and Moon - How Big? How Far?

Materials: scissors, meter stick

Cut out one Earth and one Moon. The size proportions are correct - the diameter of the Moon is about $\frac{1}{4}$ the diameter of Earth.

How far apart do you think the Earth and Moon are at this size? Place them where you think they should be. Measure the distance between them and record in the data table.

Distance Between the Earth and Moon

	Distance (cm)
Prediction	
Actual	

To find the true distance between the Earth and Moon, find the diameter of the Earth and the distance to the Moon in miles. Record below.

Diameter of the Earth _____miles Distance to the Moon _____miles

Divide the distance to the Moon by the diameter of Earth to find out how many Earths can fit between the Earth and the Moon.

Number of Earth's that can fit between the Earth and Moon _____

Can you use this information to correct your model?

If the Moon's diameter is $\frac{1}{4}$ the diameter of Earth's, how many miles wide is the Moon?

You can modify the activity by having students attach the Earth and Moon with a piece of string. The Earth and Moon should be 30 Earths apart, around 255cm.

