NAME: _____

DATE: _____

ACTIVITY INSPIRED BY

The Great Solar Eclipse Party

SOLAR ECLIPSE SIMULATION

This hands-on activity demonstrates how alignment of the Sun, Earth and Moon can cause an eclipse.

MATERIALS

- **A large round object like a beach ball, basketball or balloon**
- **A smaller round object like a styrofoam ball or a tennis ball**
- **The Sun or a flashlight**

ACTIVITY WOW TO:

A **solar eclipse** happens when the moon passes directly between the earth and the sun, casting a shadow on part or all of the earth's surface.

On a bright, sunny day you can easily demonstrate this phenomenon. Or try it indoors, using a flashlight as your light source, if the sun is not available.

1. **Pick up the Moon** (the smaller round object) and have someone else holding the Earth (the larger round object).

2. **The person holding the Moon** takes two big steps away from the person holding Earth. They then position themself between the light source and Earth and line up the Moon so that it casts a shadow on Earth.

3. **Look carefully at the shadow.** Are all parts of it equally dark? Does it cover the whole Earth? Can you try making the Moon's shadow move across the Earth? This models the path of a solar eclipse!