

# Solar Eclipse Lesson Plan

## August 21, 2017

A. Devotional with Bible verses about celestial bodies. Here are just a few:

1. God created the Sun, Moon and Earth – Genesis 1; Psalm 8:3-4
2. God holds the Earth in space – Job 26:7; Isaiah 40:22
3. God knows the stars by name – Psalm 147:14
4. Space proclaims God is the Creator – Psalm 19:1-6
5. God will re-create Earth when Jesus returns – Revelation 21

B. Solar eclipse breakfast – pancakes with your favorite topping; get creative and make three different sizes to represent the Moon, Earth and Sun; melt chocolate/carob and cover up the Earth with “darkness” etc. The sky is the limit (get it?).

C. Read from your space encyclopedia/science textbook/library books about solar eclipses. Words to look up: orbit, totality, umbra, penumbra, corona, eclipse, atmosphere, lunar, solar. For older students, prepare a handout with these words and have them copy the definition from the encyclopedia (or use the second page below).

D. NASA live streaming: some libraries will have a public event of the four-hour broadcast but, of course, you can watch it from home if you have access to NASA TV or the internet. You don't have to watch it all, of course. One hour will probably be enough to give your children an idea of what is going on across the nation.

E. Solar eclipse lunch. Tostadas with black beans (the Sun covered by the “dark” Moon). Definitely have chocolate/carob cake for dessert. Use a round pan.

F. Solar eclipse art and/or craft. Here are three ideas, all simple and cute.

1. Have the children draw what they saw or how they would imagine a total eclipse would look.
2. Using play dough, have them make a model of the position of the Sun, Moon and Earth during a solar eclipse. You could connect the three celestial bodies with toothpicks and make each in a different color: white play dough for the Moon, yellow for the Sun, and blue or green for the Earth. Set it on a paper plate and take pictures of it for your science binder/portfolio/lapbook.
3. Have the children paint one paper plate yellow, red and orange to represent the Sun. They can then paint another one black to represent the Moon. Have them use sponges or small circles from a pool noodle for a great texture, instead of brushes. Once dry, they can simulate the eclipse by slowly moving the Moon over the Sun.

### Plan ahead

1. Buy solar eclipse glasses if you plan to look at the actual event. We got ours from the Sugarlands Visitor Center in the Great Smoky Mountains National Park.
2. Get all your food made the day before.
3. Gather all books and supplies.

# Talk Like A Scientist

Look up these words in a science encyclopedia. Copy the definitions in the space below.

- orbit =
- totality =
- umbra =
- penumbra =
- corona =
- eclipse =
- atmosphere =
- lunar =
- solar =