



**DeKalb County**  
School District  
**Fernbank Science Center**

**Title:** Sizing up the Planets  
**Level:** 4th Grade  
**Location:** Local School

**Type:** Outreach  
**Length:** 55 minutes  
**Limit:** 30

**Program Description**

Students begin by telling what they know about the planets, including order from the Sun and size comparison, and look at the planets individually to compare. Students will then make a scale of the solar system (size, not distance), and discuss how the planets differ from the Sun, then will be shown how their size scale would look if distance were also taken into account.

**Science Georgia Standards of Excellence (GSE)**

S4E1. Students will compare and contrast the physical attributes of stars, star patterns, and planets.

S4E2. Students will model the position and motion of the earth in the solar system and will explain the role of relative position and motion in determining sequence of the phases of the moon.

d. Demonstrate the relative size and order from the sun of the planets in the solar system.

S4CS4. Students will use ideas of system, model, change, and scale in exploring scientific and technological matters.

**Vocabulary**

planet	scale model	orbit	asteroid
star	revolution	Sun	fusion

**Pre-Visit Activity**

Students should have an understanding of the order of the planets to the Sun and have an understanding of the difference between a planet and a star.

**Post-Visit Activity**

Build a model of the Solar System to your own specs:

[http://www.exploratorium.edu/ronh/solar\\_system/](http://www.exploratorium.edu/ronh/solar_system/)

Monitor solar activity:

<http://spaceweather.com/>

Information on the August 2017 Total Solar Eclipse

[http://www.eclipse2017.org/2017/path\\_through\\_the\\_US.htm](http://www.eclipse2017.org/2017/path_through_the_US.htm)

**Resources**

Holt Science and Technology, Georgia, Earth Science, Chapter 21