Science Planning

**Unit 1: Structure and Motion Within the Solar System (6-8 weeks)**

**Week 8 Big Idea: Planets differ from one another because of their individual properties.**

Week 8 – 10/22 – 10/26

10/22- YWBAT develop an understanding of why planets stay in an orbital pattern around the sun.

Success is: investigating the relationship between gravitational force and distance.

Phenomena: Our planets orbit the sun in their own orbital positions.

* Model the simulator: basics of how to use it, how to zoom, where planet x is and how to manipulate it, and where to find the data and graphs. <http://lasp.colorado.edu/outerplanets/orbit_simulator/>
* Students get on Chromebooks in pairs to investigate the relationship between gravitational force and distance as they answer the guiding questions.

10/23 - Gravity and Inertia Assessment

10/25 - YWBAT use computational thinking to analyze data and determine the scale and properties of objects in the solar system.

Success is: draw a map of our solar system as it relates to our cosmic address.

Phenomena: Planets differ from one another because of their individual properties.

* Discussion: Why do our planets differ from each other? What are their unique properties?
* Watch: Cosmos, episode 1 (first 25 minutes); Our Cosmic Address
  + Purpose: take notes on where planets are in the solar system and what unique properties they have as well as the levels of our cosmic address
* Draw a map of our solar system with the cosmic address