

The background is a solid green color with several overlapping white circles of varying sizes and opacities, creating a layered, abstract pattern.

**Earth and Space Science  
Wednesday  
1/18/2017**

Note: We still need about 5 more chaperones for the field trip!

Also, If you need a sack lunch for the field trip, I am going to take a count and write your name down. When I take your order, you will be charged for it, whether you take the lunch or not..

Today we are going to make a scale model of the galaxy, with the intention of showing how far apart the planets really are.

For this demonstration, you will be measuring in millimeters.  $1\text{mm} = 1\text{ million miles}$ .

In a moment, you'll receive a long strip of paper. You will need a ruler. If you do not have yours, you may need to share with your table mate.

Follow along with the directions....

1.



2.



3.



4.



5. Measuring from the Sun, make a line at 93 mm. Mark this "Earth"

6. Measuring from EARTH this time, make a line 137mm away from Earth...or 13.7cm. Label this line mars

7. Measuring from Mars, make a line at 447mm...or 44.7cm. Label this Jupiter.

8. Measuring from Jupiter, make a line 655mm away, or 65.5cm..or 25.8in on your yardstick. Label this Saturn.

9. Measuring from Saturn, make a line 1,911mm away...or 191.1cm away...or 75.2 inches. Label this Uranus.

10. Measuring from Uranus, make a line 1,011mm away...or 101.1cm away..or 39.8 inches on your yardstick. Label this Neptune.

11. Measuring from the SUN. Measure 3.9 yards. Label this Pluto.

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**Earth and Space Science**  
**Thursday**  
**1/19/2017**

Today we are going to finish up your models of the planetary system.





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**Earth and Space Science  
Friday  
1/20/2017**

★ What  
★ happened  
★ to Pluto?



**We are going to launch an investigation.**

**There is an ongoing debate in the scientific community regarding whether or not Pluto is a planet.**

**As we review several sources, write down key pieces of evidence to support your opinion.**

**The question we are going to attempt to debate:**

**Is Pluto a planet?**

## What is a planet?

The International Astronomical Union defines a planet as an object that...

1.



2.



3.

4.



**Based on the information you have written down, what is your opinion? You MUST have evidence written down to support your ideas.**

**Raise your hand if you think Pluto should still be considered a planet.**

**Pro**

**con**