Scale Model of Solar System

Worksheet

Name _____ Date _____

Complete the worksheet as you do Session 5.

Actual and Scaled Distances from Sun to Planets*

PLANET	AV. DISTANCE FROM SUN (million miles)	SCALE 1 mm = 1 x 10^6 mi (mm to planet)	SCALE 1 mm = 1 x 10^6 mi (cm to planet)	SCALE 2 mm = 1 x 10^6 mi (cm to planet)
Mercury	37.5			
Venus	70			
Earth	93	93	9.3	18.6
Mars	140			
Jupiter	484			
Saturn	890			
Uranus	1,800			
Neptune	2,800			
Pluto (closest)	2,750			
Pluto (farthest)	4,583			

*Beginning in 2006, Pluto was classified as a dwarf planet, but you will include it in your scale model to demonstrate elliptical orbits and the extremely large expanse of the solar system.

Questions

1. In relation to the Sun, how is the placement of the first four planets different from the placement of the last five?

2. How do planetary distances change between Mars and Jupiter?

3. Explain why there are two distance values given for the dwarf planet Pluto but not for the eight large planets.

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