

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 = 1×10^6 mi (mm to planet)	SCALE 1 mm = 1×10^6 mi (cm to planet)	SCALE 2 mm = 1×10^6 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

- In relation to the Sun, how is the placement of the first four planets different from the placement of the last five?
- How do planetary distances change between Mars and Jupiter?
- Explain why there are two distance values given for the dwarf planet Pluto but not for the eight large planets.