

Planets

- Distances are in km. When changing to scientific notation, include only 1 digit after the decimal (but be sure to round).

Planet	Distance from sun	Scientific Notation	Scaled distance in mm in Scientific Notation	Planet Diameter	Scientific Notation	Scaled diameter in mm in Scientific Notation
Mercury	57,910,000			4,800		
Venus	108,200,000			12,100		
Earth	149,600,000			12,750		
Mars	227,940,000			6,800		
Jupiter	778,330,000			142,800		
Saturn	1,429,400,000			120,660		
Uranus	2,870,990,000			51,800		
Neptune	4,504,300,000			49,500		
Pluto	5,913,520,000			3,000		

If you were trying to draw a solar system on a single regular size piece of paper, which is 280 mm in landscape view, what scale could you use when considering the distance of Pluto from the Sun?

How big would Jupiter be?

How big would Earth be?

Usually when scientists create a scale model of the solar system, they use different scales for both the planets and the distances. Based on your findings above, why would they choose to do this?