

## Scientific Notation and the Solar System

Celestial Body	Diameter	Average Distance from the Sun
Sun	$1.3 \times 10^6$ m	
Mercury	$5 \times 10^3$ m	$58 \times 10^6$ m
Venus	$12 \times 10^3$ m	$108 \times 10^6$ m
Earth	$13 \times 10^3$ m	$150 \times 10^6$ m
Mars	$7 \times 10^3$ m	$230 \times 10^6$ m
Jupiter	$143 \times 10^3$ m	$778 \times 10^6$ m
Saturn	$121 \times 10^3$ m	$1427 \times 10^6$ m
Uranus	$51 \times 10^3$ m	$2880 \times 10^6$ m
Neptune	$50 \times 10^3$ m	$4500 \times 10^6$ m
Pluto	$2.3 \times 10^2$ m	$5900 \times 10^6$ m

### Scale

Let 1 m represent  $10^7$  km =  $10 \times 10^6$  km

Then 1mm represents  $10^7/10^3 = 10^4$  km =  $10 \times 10^3$  km

Make a table showing the scale diameters and scale distances

Celestial Body	Scale Diameter	Scale Distance from the Sun
Sun		
Mercury		
Venus		
Earth		
Mars		
Jupiter		
Saturn		
Uranus		
Neptune		
Pluto		