



Planetary Gallery

The Sun's Family Portrait

Name(s) _____ Date _____

Instructor/Class _____

Please answer the following questions.

1. What is the approximate length of the scale bar? (Remember you are still measuring in pixels.)
 - 60-65 pixels
 - 80-85 pixels
 - 100-105 pixels

2. What is the scale? (*Hint*: It will be labeled at the bottom of the **Set Scale** window.)
 - Approximately 0.270 pixels/km
 - Approximately 270 pixels/km
 - Approximately 0.0270 pixels/km

3. What is the approximate diameter of Venus? **Record this and all your other measurements on the table on the following page.**
 (*Hint*: These images are not always perfect circles since sometimes one edge is in shadow and hard to see. Make sure that you draw your lines through the center of the planet.)
 - Approximately 38,700 km
 - Approximately 11,800 km
 - What's a diameter?

4. Next, measure Earth, using the same technique. Then, fill in the blanks:

 Earth, at _____ in diameter, is almost the same size as _____, which has a diameter of _____.

5. Next, measure the diameters of Mars and Jupiter. Again, fill in the blanks in the following statements:

 Mars, the "Red Planet," is _____ in diameter and is _____
 _____ than Jupiter, which is _____ in diameter.

6. This time, measure the sun and Pluto, and fill in the blank in the following statement.

The sun is _____Pluto.

7. Now, measure the last three: the moon, Mercury, and Neptune. Which is the smallest?

- Mercury
- Neptune
- Moon

Celestial Body	Diameter (km)
<i>Venus</i>	
<i>Earth</i>	
<i>Mars</i>	
<i>Jupiter</i>	
<i>Sun</i>	
<i>Pluto</i>	
<i>Moon</i>	
<i>Mercury</i>	
<i>Neptune</i>	
<i>Saturn</i>	
<i>Uranus</i>	

8. This list is in random order: Rearrange the celestial objects of our solar system so that the largest is at the top.

Celestial Body	Order of Size (largest at top)
<i>Venus</i>	
<i>Earth</i>	
<i>Mars</i>	
<i>Jupiter</i>	
<i>Sun</i>	
<i>Pluto</i>	
<i>Moon</i>	
<i>Mercury</i>	
<i>Neptune</i>	
<i>Saturn</i>	
<i>Uranus</i>	

9. Match the diameter of the celestial body to the dimension of the earthly item that's the correct relative size - and that will allow all the bodies fit into the gallery space of your mobile. (*Hint: Here's one to get you started. The photograph of Pluto will need to be the size of a sesame seed [those little seeds on hamburger buns]*).

Celestial Body	Comparative Size
<i>Venus</i>	same as Pluto
<i>Earth</i>	diameter of a CD
<i>Mars</i>	length of a sesame seed
<i>Jupiter</i>	length of an apple seed
<i>Sun</i>	diameter of a large drinking straw
<i>Pluto</i>	length of a large grape
<i>Moon</i>	diameter of a pencil eraser
<i>Mercury</i>	diameter of a soft drink can
<i>Neptune</i>	diameter of a school bus tire
<i>Saturn</i>	diameter of a chicken egg
<i>Uranus</i>	same as Earth