

Name _____

Date _____



PROBLEM SOLVING - THE SOLAR SYSTEM (METRIC UNITS)

Have a look at the data on our planets below, then answer the questions.

PLANET	MEAN RADIUS (km)	MEAN DIAMETER (km)	RADIUS TO NEAREST 1000 km
Mercury	2440		
Venus	6052		
Earth	6371		
Mars	3390		
Jupiter	69911		
Saturn	58232		
Uranus	25362		
Neptune	24622		

- 1) Fill in the mean diameter of each planet by using the radius. The mean diameter is twice the mean radius.
- 2) Round each radius to the nearest 1000 km and fill in the column on the right hand side.
- 2) Write the planets in order, from smallest to largest below (you can write the first 3 letters in each planet's name).

- 3) How much larger is the radius of Saturn than the radius of Earth?
- 4) How much smaller is the radius of Mars than the radius of Neptune?
- 5) What is the total radius of the three largest planets?
- 6) Circle the correct answer. The radius of Jupiter is about:
2 times 5 times 10 times 20 times bigger than the radius of Earth.





PROBLEM SOLVING - THE SOLAR SYSTEM

ANSWERS (METRIC UNITS)

PLANET	MEAN RADIUS (km)	MEAN DIAMETER (km)	RADIUS TO NEAREST 1000 km
Mercury	2440	4880	2000
Venus	6052	12104	6000
Earth	6371	12742	6000
Mars	3390	6780	3000
Jupiter	69911	139822	70000
Saturn	58232	116464	58000
Uranus	25362	50724	25000
Neptune	24622	49244	25000

1) Fill in the mean diameter of each planet by using the radius. The mean diameter is twice the mean radius.

2) Round each radius to the nearest 1000 km and fill in the column on the right hand side.

2) Write the planets in order, from smallest to largest below (you can write the first 3 letters in each planet's name).

Mercury Mars Venus Earth Neptune Uranus Saturn Jupiter

3) How much larger is the radius of Saturn than the radius of Earth? **51,861 km**

4) How much smaller is the radius of Mars than the radius of Neptune? **21,232 km**

5) What is the total radius of the three largest planets? **153,505 km**

6) Circle the correct answer. The radius of Jupiter is about:

2 times 5 times **10 times** 20 times bigger than the radius of Earth.

