

Comparing the mass of planets to size of planet



Purpose:

How does the weight of planets to compare to its size?

Procedure:

1. Copy the data table below (not the size column)
2. Using a triple-beam-balance measure the mass of the pop cans
3. Put in the initial column who did the actual measuring of the can.

Object	Mass	Initials	Size (diameter)
Mercury			2,357.27
Venus			6,052.45
Earth			6,710
Mars			3,376.63
Jupiter			70,081
Saturn			59,887.4
Uranus			25,933.68
Neptune			24,146.09
Pluto			1,146.78

Analyzing the Data;

1. Which planet had the most weight?
2. How many planets had a greater mass than Earth?
3. How many planets had a smaller mass than Earth?
4. Which 2 planets are close to the same mass?
5. Are these 2 planets similar in size?
6. Why do you think some planets like Saturn can be so big but have such a small weight?
7. Is there any relationship between the size of a planet and their mass?
8. What do you think is the reason for planets mass if its not their size?