

INQUIRY SKILL FOCUS Practice

Create Bar Graphs

Answer the questions below on a separate sheet of paper. Use a sheet of graph paper to make the graph.

The table below shows the relative diameters of the planets in our solar system in Earth units. That means that Earth is represented as having a diameter of 1 Earth unit. The planet Uranus, which has a diameter that is four times the size of Earth's diameter, is represented by 4 Earth units. The planets are listed in order of their distance from the sun. Mercury is the closest, and Pluto is the farthest away.

Diameters of the Planets in Earth Units	
Planet	Diameter in Earth Units
Mercury	0.40
Venus	0.95
Earth	1.00
Mars	0.50
Jupiter	11.20
Saturn	9.50
Uranus	4.00
Neptune	3.90
Pluto	0.20

1. On which axis will you place the names of the planets? (*Hint:* The planets are similar to a category being studied, or a manipulated variable. List the planets in the same order as in the table, starting with Mercury.)
2. Notice that the measurements you need to represent include some numbers between 0 and 1, with the largest number between 11 and 12. What scale will you use to represent the planet diameters? (*Hint:* You may need to estimate the height of certain bars.)
3. On a sheet of graph paper, make a bar graph that displays the data in the table.
4. **Think It Over** Suppose you made a bar graph showing the planets' distances from the sun, and you listed them in the same order as in this graph. How would the new graph be similar to the graph you just made? How would it be different?