Planet Sizes

Earth is 7,918 miles wide. Divide a planet's diameter by 7,918 to see how many Earths wide it is.

Name: Date:

Planet	Diameter (miles)	Earths wide
Mercury	3,032	
Venus	7,521	0.95
Earth	7,918	1
Mars	4,212	
Jupiter	86,881	
Saturn	72,367	9.1
Uranus	31,518	
Neptune	30,598	

Round to one decimal place. Use a calculator.

Scale model: Earth = 1 cm

If Earth is 1 cm wide, then Mercury is 0.4 cm, Venus is 0.9 cm and Mars is 0.5 cm. Use a ruler or a compass to draw them as circles below, and label each one.

Draw Mercury, Venus, Earth and Mars here.

1. Which two planets are closest in size to each other?

2. About how many Earths would fit across Jupiter?

3. Which kind of planets are bigger: the rocky ones or the giant ones?

4. The Sun is 109 times as wide as Earth. If Earth is a 1 cm marble, how wide would the Sun be (in centimeters)?

(T) (F) Mercury is the smallest planet.

(T) (F) Neptune is bigger than Saturn.

Answer key

Planet Sizes · for parents and teachers

1. **Table:** Mercury 3,032 ÷ 7,918 ≈ 0.4 · Mars 4,212 ÷ 7,918 ≈ 0.5 · Jupiter 86,881 ÷ 7,918 ≈ 11.0 · Uranus 31,518 ÷ 7,918 ≈ 4.0 · Neptune 30,598 ÷ 7,918 ≈ 3.9.
2. **Scale model:** circles of diameter 0.4 cm, 0.9 cm, 1 cm and 0.5 cm.
3. **Q1:** Earth and Venus (also Uranus and Neptune, and Jupiter and Saturn, are close pairs). **Q2:** About 11. **Q3:** The giant planets. **Q4:** 109 cm (a little over 1 meter or 3.5 feet).
4. **True/False:** first is True; second is False (Saturn is much bigger than Neptune).

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