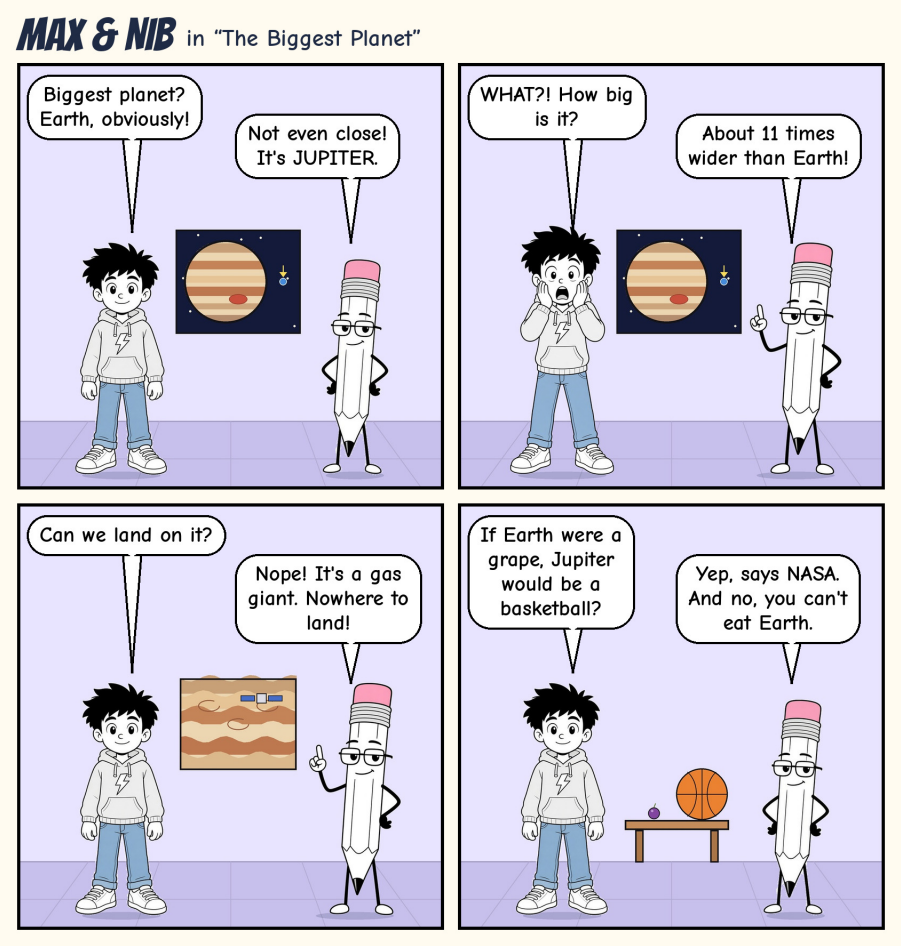


Name: _____ Date: _____

What's the Biggest Planet in the Solar System?

Space · Grades 3–6 · About 15 minutes · Max & Nib

Cool facts

What is the biggest planet in our solar system? It is not Earth! The biggest planet is Jupiter. NASA says Jupiter is about 88,846 miles wide around its middle, which is called the equator. Earth is only about 7,926 miles wide. That makes Jupiter about 11 times wider than Earth. NASA has a fun way to picture it: if Earth were the size of a grape, Jupiter would be about as big as a basketball. Jupiter is a gas giant. It is made mostly of swirling gases and liquids, so it does not have a solid surface like Earth does. A spacecraft would have nowhere to land! Jupiter also has a giant storm called the Great Red Spot, and that storm is bigger than Earth.

Questions

1. What is the biggest planet in our solar system?

2. About how many times wider than Earth is Jupiter?

3. Why couldn't a spacecraft land on Jupiter?

4. Jupiter is about 88,846 miles wide. Earth is about 7,926 miles wide. How many miles wider is Jupiter?

Show your work

Write about it

If you could fly a spacecraft past Jupiter, what would you want to see first: the Great Red Spot, the cloud stripes, or something else? Explain why.

Word Record **Gas giant**: a huge planet made mostly of gases like hydrogen and helium, with no solid ground to stand on.

What's the Biggest Planet in the Solar System? — Answer Key

Grades 3–6 · For teacher or parent use

Answers

1. What is the biggest planet in our solar system?

   Jupiter.

2. About how many times wider than Earth is Jupiter?

   About 11 times wider.

3. Why couldn't a spacecraft land on Jupiter?

   Jupiter is a gas giant made mostly of gases and liquids, so it has no solid surface to land on.

4. Jupiter is about 88,846 miles wide. Earth is about 7,926 miles wide. How many miles wider is Jupiter?

   About 80,920 miles wider (88,846 − 7,926 = 80,920).

Writing prompt: If you could fly a spacecraft past Jupiter, what would you want to see first: the Great Red Spot, the cloud stripes, or something else? Explain why.
Accept any reasoned answer for the writing prompt. For adults: NASA lists Jupiter's equatorial diameter as 88,846 miles (142,984 km) and Earth's as about 7,926 miles (12,756 km), so Jupiter is about 11 times wider. Both widths are measured at the equator; Jupiter is a little narrower pole to pole because it bulges at the equator. The grape-and-basketball comparison and the “no true surface” description come from NASA’s Jupiter Facts page. Numbers are rounded, so the sheet uses “about.”

Sources

- NASA Science: Planet Sizes and Locations in Our Solar System — https://science.nasa.gov/solar-system/planets/planet-sizes-and-locations-in-our-solar-system/
- NASA Science: Jupiter Facts — https://science.nasa.gov/jupiter/jupiter-facts/
- NASA Space Science Data Coordinated Archive: Jupiter Fact Sheet — https://nssdc.gsfc.nasa.gov/planetary/factsheet/jupiterfact.html

Cool Fact Jupiter is about **5 times farther** from the Sun than Earth. Sunlight takes about **43 minutes** to get there! (NASA)

Cool Fact Jupiter’s Great Red Spot is a storm that has been swirling for **hundreds of years**. (NASA)

Cool Fact Jupiter is the **oldest planet**, about 4.6 billion years old! (NASA)