

# Exploring Jupiter - Activities (Ages 8-11)



## Today we are going to investigate:

- The largest planet in the Solar System
- What Jupiter is made of
- The weather on Jupiter
- Jupiter's many moons

## Activities

- 1 Today we are going to look at the largest planet in our Solar System. This is Jupiter and it is one of the easiest planets to see in the sky. Start up Night Sky and see if you can find Jupiter. (Tip: If you find this hard try typing "Jupiter" into Search). Tap on Jupiter in the sky to bring up a 3D close-up view of the planet. Tap on the ⓘ to open an information panel of facts about Jupiter.

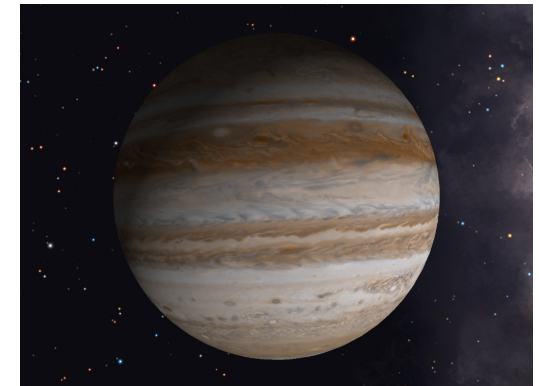
**Question:** Using the the information panel, which ancient civilization named the planet?  
a) Vikings      b) Romans      c) Aztecs

- 2 Jupiter is very different from planets like Earth, Mars or Venus. These planets are made of rock and metal. Instead Jupiter is made of gases. This is why astronomers call Jupiter and other planets like it **gas giants**. Jupiter has no solid surface because it is made of gases so no one could ever walk on Jupiter.

**Question:** True or false? The two gases that Jupiter is made up of are Hydrogen and Helium.

- 3 When we see Jupiter from space we are looking at swirling stripes of clouds at the top of Jupiter's atmosphere. By looking at Jupiter we are really watching Jupiter's weather including the largest storm ever seen. It is called the Great Red Spot. Go back to the 3D view to watch Jupiter revolve and look for this giant storm.

**Question:** Use the information panel to find out the century when the Great Red Spot was first seen by a telescope.



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- 4 Jupiter's Great Red Spot is huge, about twice as wide as Earth! However, Jupiter is also a huge planet. Look at the giant storm, compare it to the size of the planet and estimate the answer to the next question

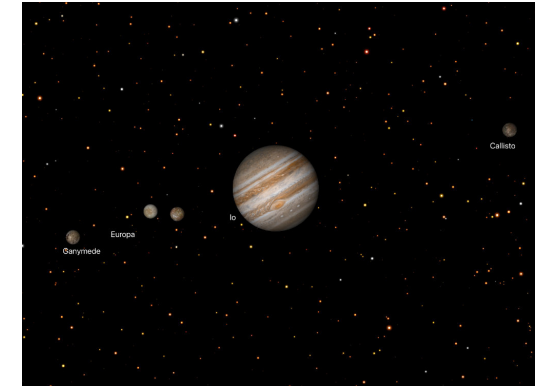
**Question:** How times larger do you think Jupiter is than Earth?

- a) 2 times    b) 5 times    c) 11 times

- 5 Jupiter also has a giant family of 95 moons circling around it. Most of these moons are very small but four moons are much larger than the rest. They are Io, Europa, Callisto and Ganymede. Zoom in to find them around Jupiter. The four are called the Galilean moons after the Italian scientist Galileo who found them in 1610. Galileo discovered these moons because he had a big advantage over every other astronomer at the time.

**Question:** What do you think this advantage was?

- a) He had very good eyesight  
b) He was the first astronomer to use a telescope  
c) He slept all day so he could stay up all night!



Well done!  
You're a Night Sky  
Superstar!

### What we have discovered:

- Jupiter is the largest planet in the Solar System
- It is made of gases so astronomers call it a "gas giant"
- It is has not got a solid surface
- The astronomer Galileo discovered Jupiter's four largest moons