Name: _____ Date: _____

Jupiter, the Giant Planet

Circle group

Jupiter is the biggest planet in our solar system. It is so big that all the other planets could fit in it, with room left over. More than 1,300 Earths could fit in Jupiter.

Jupiter is not a rocky planet like Earth. It is a gas giant. It is made mostly of two gases, hydrogen and helium. The sun is made of the same gases. Try to land a spaceship on Jupiter, and you would find no solid ground. You would sink down and down through thick, swirling clouds.

The clouds make bright stripes across the planet. Jupiter also has a giant storm called the Great Red Spot. This storm is wider than Earth. Sky watchers have seen it for close to two hundred years. Scientists have seen the Spot get smaller over time.

Jupiter is huge, but it spins faster than any other planet. One day on Jupiter is only about ten hours long. Jupiter also has close to a hundred moons that we know of. In 1610, a man named Galileo used one of the first telescopes. He found four of the biggest moons. We still call them the Galilean moons.

A few spacecraft have gone to Jupiter. Some flew past it. Some, like Juno, have gone around it to study its clouds, its storms, and what is deep inside.

Questions

1. How many Earths could fit in Jupiter?

_____

_____

2. What is Jupiter made of, mostly?

_____

_____

3. What is the Great Red Spot?

_____

_____

4. Why can't a spaceship land on Jupiter?

_____

_____

5. Jupiter is huge. What is surprising about how fast it spins?

_____

_____

Words to know

solar system: the sun and all the planets and other objects that travel around it
gas giant: a large planet made mostly of gas, not rock

Talk together (every group has these)

1. Find one fact that every group read. How did your sheet say it?
2. What did your sheet tell you that you think another group's did not? Ask them.
3. What is one question about this topic that none of the sheets answered?

Name: _____ Date: _____

Jupiter, the Giant Planet

Triangle group

Jupiter is the biggest planet in our solar system. It is so big that all the other planets could fit inside it with room to spare. More than 1,300 Earths could fit inside Jupiter.

Unlike Earth, Jupiter is not a rocky planet. It is a gas giant, made mostly of hydrogen and helium, the same gases that make up the sun. If you tried to land a spaceship on Jupiter, you would find no solid ground to stand on. You would sink deeper and deeper through thick, swirling clouds.

Those clouds make colorful stripes across the planet. Jupiter also has a giant storm called the Great Red Spot. This storm is wider than Earth and has been watched by astronomers for almost two hundred years. Scientists have noticed that the Spot has been getting smaller over time.

Even though Jupiter is huge, it spins faster than any other planet. One day on Jupiter lasts only about ten hours. The planet also has almost a hundred known moons. In 1610, an astronomer named Galileo used one of the first telescopes to discover four of the largest ones. They are still called the Galilean moons.

Several spacecraft have visited Jupiter. Some flew past it, and some, like the Juno mission, have orbited the planet to study its clouds, its storms, and what lies deep inside.

Questions

1. How many Earths could fit inside Jupiter?

_____

_____

2. What is Jupiter mostly made of?

_____

_____

3. What is the Great Red Spot?

_____

_____

4. Why couldn't a spaceship land on Jupiter?

_____

_____

5. What is surprising about how fast Jupiter spins, given its size?

_____

_____

Words to know

solar system: the sun and all the planets and other objects that travel around it
gas giant: a large planet made mostly of gas, not rock
astronomer: a scientist who studies stars, planets, and space
orbit: to travel around a bigger object in space
mission: a special trip or job, such as a space trip to collect information

Talk together (every group has these)

1. Find one fact that every group read. How did your sheet say it?
2. What did your sheet tell you that you think another group's did not? Ask them.
3. What is one question about this topic that none of the sheets answered?

Name: _____ Date: _____

Jupiter, the Giant Planet

Square group

Jupiter is the largest planet in our solar system. It is so immense that all of the other planets combined could fit inside it with room to spare. In fact, more than 1,300 Earths could fit within Jupiter.

Unlike Earth, Jupiter is not a rocky planet. Instead, it is a gas giant, composed primarily of hydrogen and helium, the same gases that make up the sun. If you attempted to land a spacecraft on Jupiter, you would discover no solid ground whatsoever. Your vessel would simply sink deeper and deeper through thick, swirling clouds.

Those clouds create colorful stripes that stretch across the planet. Jupiter also possesses an enormous storm known as the Great Red Spot. This storm is wider than Earth, and astronomers have observed it for almost two hundred years. Scientists have noticed, however, that the Spot has been gradually shrinking over time.

Despite its tremendous size, Jupiter rotates faster than any other planet, so a single day on Jupiter lasts only about ten hours. The planet also has almost a hundred known moons. In 1610, an astronomer named Galileo used one of the earliest telescopes to discover four of the largest ones, which are still called the Galilean moons.

Several spacecraft have explored Jupiter. Some flew past the planet, while others, including the Juno mission, have orbited it to investigate its clouds, its storms, and its mysterious interior.

Questions

1. Approximately how many Earths could fit within Jupiter?

_____

_____

2. What gases is Jupiter primarily composed of?

_____

_____

3. What is the Great Red Spot?

_____

_____

4. Why would it be impossible to land a spacecraft on Jupiter?

_____

_____

5. What is surprising about Jupiter's rotation, considering its tremendous size?

_____

_____

Words to know

solar system: the sun and all the planets and other objects that travel around it
gas giant: a large planet made mostly of gas, not rock
astronomer: a scientist who studies stars, planets, and space
orbit: to travel around a bigger object in space
mission: a special trip or job, such as a space trip to collect information

Talk together (every group has these)

1. Find one fact that every group read. How did your sheet say it?
2. What did your sheet tell you that you think another group's did not? Ask them.
3. What is one question about this topic that none of the sheets answered?

For the teacher: Jupiter, the Giant Planet

Each student sheet carries a shape, not a level. The same topic and facts, written three ways.

Circle: Jupiter, the Giant Planet

Easier · 220 words · Flesch-Kincaid grade 3.6

1. More than 1,300.
2. Two gases, hydrogen and helium.
3. A giant storm on Jupiter. It is wider than Earth, and people have watched it for close to two hundred years.
4. Jupiter is a gas giant with no solid ground. A ship would sink through thick clouds.
5. It is the biggest planet, but it spins faster than any other planet. A day there is only about ten hours.

Triangle: Jupiter, the Giant Planet

This passage · 221 words · Flesch-Kincaid grade 5.9

1. More than 1,300.
2. Hydrogen and helium gases.
3. A giant storm on Jupiter, wider than Earth, that people have watched for almost two hundred years.
4. Jupiter is a gas giant with no solid ground. A ship would sink through thick, swirling clouds.
5. It is the biggest planet but spins faster than any other planet, with a day of only about ten hours.

Square: Jupiter, the Giant Planet

Harder · 229 words · Flesch-Kincaid grade 8.4

1. More than 1,300.
2. Hydrogen and helium.
3. An enormous storm on Jupiter, wider than Earth, that astronomers have observed for almost two hundred years.
4. Jupiter is a gas giant with no solid ground, so a spacecraft would sink through thick, swirling clouds.
5. Although it is the largest planet, it rotates faster than any other, with a day of only about ten hours.