Name: _____ Date: _____

Io, the Moon with Fiery Mountains

Circle group

Jupiter is the biggest planet. It has many moons. One is named Io. Io is about as big as our Moon, but it is very different. It has more volcanoes than any other world we know.

A spacecraft flew past Io. Its cameras saw something amazing. Clouds were shooting up from the ground. They were volcanoes erupting. Some sent plumes high in the sky.

Io looks like a giant pizza. It has yellow, orange, red and white patches. Scientists think many of the colors come from a yellow material called sulfur.

Why is Io so hot inside? Jupiter is huge, and it pulls hard on Io. Nearby moons tug on Io too. The pulling squeezes Io again and again, like a ball in your hand. The squeezing makes heat. The heat melts rock deep inside.

Io is wild. It has no air to breathe. It is far too hot for visitors. But from far away, it shows us how a small world can stay full of fire.

Questions

1. Which planet does Io go around?

_____

_____

2. What is special about Io?

_____

_____

3. What did the spacecraft's cameras see on Io?

_____

_____

4. What yellow material gives Io some of its colors?

_____

_____

5. What makes the inside of Io so hot?

_____

_____

6. Why is Io compared to a giant pizza?

_____

_____

Words to know

volcanoes: mountains with openings where hot melted rock escapes
erupting: bursting out with force
plumes: tall clouds that rise like feathers
sulfur: a yellow material found in some rocks and volcanoes
spacecraft: a vehicle that travels in space

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: _____

Io, the Moon with Fiery Mountains

Triangle group

Jupiter is the biggest planet, and it has many moons. One of them is named Io. Io is about the size of our own Moon, but it is very different. It has more volcanoes than any other world we know.

When a spacecraft flew past Io, its cameras saw something amazing. Clouds of material were shooting up from the surface. These were volcanoes erupting. Some of them were sending plumes high above the ground.

Io looks like a giant pizza. Its surface has yellow, orange, red and white patches. Scientists think many of these colors come from a yellow material called sulfur.

Why is Io so hot inside? Jupiter is huge, and its pull on Io is strong. The nearby moons tug on Io too. All this pulling squeezes Io again and again, like a ball you squeeze in your hand. The squeezing makes heat, and the heat melts rock deep inside.

Io is a wild place with no air to breathe and a surface much too hot for visitors. But from far away, it has taught us how a small world can stay full of fire.

Questions

1. Which planet does Io travel around?

_____

_____

2. What is special about Io?

_____

_____

3. What did the spacecraft's cameras see on Io?

_____

_____

4. What is the yellow material that gives Io some of its colors?

_____

_____

5. What makes the inside of Io so hot?

_____

_____

6. Why does the passage compare Io to a giant pizza?

_____

_____

Words to know

volcanoes: mountains with openings where hot melted rock escapes
erupting: bursting out with force
plumes: tall clouds that rise like feathers
sulfur: a yellow material found in some rocks and volcanoes
spacecraft: a vehicle that travels in space

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: _____

Io, the Moon with Fiery Mountains

Square group

Jupiter, the largest planet in our solar system, has a great many moons. One of them is named Io. Io is about the same size as our own Moon, yet it is dramatically different, because it has more active volcanoes than any other world we know.

When a spacecraft sailed past Io, its cameras captured something astonishing. Enormous clouds of material were blasting upward from the surface. These were volcanoes erupting, and some of them hurled plumes far above the ground.

Io resembles a giant pizza. Its surface is patched with yellow, orange, red and white. Scientists believe that many of these colors come from a yellow material called sulfur.

Why is Io so hot inside? Jupiter is enormous, and its pull on Io is powerful. The neighboring moons tug on Io as well. All of this pulling squeezes Io again and again, much like a ball squeezed in your hand. The squeezing creates heat, and the heat melts rock deep inside.

Io is a wild place, with no air to breathe and a surface far too hot for visitors. But even from a distance, it has taught us how a small world can stay full of fire.

Questions

1. Which planet does Io travel around?

_____

_____

2. What makes Io special?

_____

_____

3. What did the spacecraft's cameras capture on Io?

_____

_____

4. What yellow material do scientists think gives Io some of its colors?

_____

_____

5. What makes the inside of Io so hot?

_____

_____

6. Why does the passage say Io resembles a giant pizza?

_____

_____

Words to know

volcanoes: mountains with openings where hot melted rock escapes
erupting: bursting out with force
plumes: tall clouds that rise like feathers
sulfur: a yellow material found in some rocks and volcanoes
spacecraft: a vehicle that travels in space

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: Io, the Moon with Fiery Mountains

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

Circle: Io, the Moon with Fiery Mountains

Easier · 167 words · Flesch-Kincaid grade 2.7

1. Jupiter.
2. It has more volcanoes than any other world we know.
3. Volcanoes erupting and sending plumes into the sky.
4. Sulfur.
5. Pulling from Jupiter and nearby moons squeezes it and makes heat.
6. Its yellow, orange, red and white patches look like pizza toppings.

Triangle: Io, the Moon with Fiery Mountains

This passage · 187 words · Flesch-Kincaid grade 4

1. Jupiter.
2. It has more volcanoes than any other world we know.
3. Volcanoes erupting and sending plumes into the sky.
4. Sulfur.
5. The pulling of Jupiter and nearby moons squeezes it and makes heat.
6. Its yellow, orange, red and white patches look like pizza toppings.

Square: Io, the Moon with Fiery Mountains

Harder · 198 words · Flesch-Kincaid grade 5.7

1. Jupiter.
2. It has more active volcanoes than any other world we know.
3. Volcanoes erupting and hurling plumes above the ground.
4. Sulfur.
5. The pulling of Jupiter and neighboring moons squeezes it and creates heat.
6. Its yellow, orange, red and white patches look like pizza toppings.