Name: _____ Date: _____

Flash First, Boom Later

Circle group

In a storm, you see a bright flash. Then you hear a loud boom. Why does the light come first?

The flash is lightning. It is a big spark of electricity. The boom is thunder. It is the sound lightning makes. The lightning heats the air very fast.

Both happen at once. But light is faster than sound. Light gets to your eyes right away. Sound takes more time.

If lightning is far, you wait for the boom. If it is close, the boom is fast.

Thunder is a warning. Go inside. Stay in until the storm is over.

Questions

1. What is lightning?

_____

_____

2. What makes the sound of thunder?

_____

_____

3. Which is faster, light or sound?

_____

_____

4. What should you do when you hear thunder?

_____

_____

5. The boom comes right after the flash. Is the lightning close or far?

_____

_____

Words to know

lightning: a giant spark of electricity in the sky
thunder: the loud boom after a flash of lightning
electricity: a kind of energy that can make sparks

warning: something that tells you to be careful

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: _____

Flash First, Boom Later

Triangle group

During a storm, you may see a bright flash in the sky. A few seconds later, you hear a loud boom. Why does the light come first?

The flash is lightning. It is a giant spark of electricity. The boom is thunder. Thunder is the sound the lightning makes when it heats the air very fast.

Both happen at the same moment. But light and sound travel at different speeds. Light is much, much faster. It reaches your eyes almost at once. Sound is slower, so it needs more time to reach your ears.

If the lightning is far away, you wait longer for the boom. If it is close, the boom comes fast.

Thunder is also a warning. When you hear it, go inside a building and stay there until the storm is over.

Questions

1. What is lightning?

_____

_____

2. What makes the sound of thunder?

_____

_____

3. Which travels faster, light or sound?

_____

_____

4. What should you do when you hear thunder?

_____

_____

5. You see a flash and the boom comes right away. Is the lightning close or far?

_____

_____

Words to know

lightning: a giant spark of electricity in the sky
thunder: the loud boom after a flash of lightning
electricity: a kind of energy that can make sparks
warning: something that tells you to be careful

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: _____

Flash First, Boom Later

Square group

During a thunderstorm, you might notice a bright flash across the sky, followed a few seconds later by a loud boom. Why does the light always arrive before the sound?

The flash is lightning, which is a giant spark of electricity. The boom is thunder, the sound that lightning makes when it heats the air around it extremely fast.

Both of them happen at exactly the same moment, but light and sound travel at very different speeds. Light is much, much faster, so it reaches your eyes almost instantly. Sound moves more slowly, so it needs extra time to reach your ears.

When lightning is far away, you wait a longer time for the boom, but when it is close, the boom follows quickly.

Thunder is also an important warning. As soon as you hear it, go inside a building and stay there until the storm has passed.

Questions

1. What is lightning?

_____

_____

2. What causes the sound of thunder?

_____

_____

3. Which travels faster, light or sound?

_____

_____

4. What should you do as soon as you hear thunder?

_____

_____

5. If the boom follows the flash almost at once, is the lightning near or far away?

_____

_____

Words to know

lightning: a giant spark of electricity in the sky
thunder: the loud boom after a flash of lightning
electricity: a kind of energy that can make sparks
warning: something that tells you to be careful

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: Flash First, Boom Later

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

Circle: Flash First, Boom Later

Easier · 99 words · Flesch-Kincaid grade 0.6

1. A big spark of electricity.
2. Lightning heats the air very fast.
3. Light.
4. Go inside and stay there.
5. Close, because there was no long wait.

Triangle: Flash First, Boom Later

This passage · 135 words · Flesch-Kincaid grade 2.3

1. A giant spark of electricity.
2. The lightning heats the air very fast.
3. Light.
4. Go inside a building and stay there.
5. Close, because there was no long wait.

Square: Flash First, Boom Later

Harder · 148 words · Flesch-Kincaid grade 6.1

1. A giant spark of electricity.
2. The lightning heats the air around it extremely fast.
3. Light travels much faster.
4. Go inside a building and stay there until the storm has passed.
5. Near, because there is hardly any wait.