Name: _____ Date: _____

Sunlight Takes an Eight Minute Trip

Circle group

You feel warm sunlight on your face. That light left the Sun a little while ago. Light is not instant. It has to travel. The trip from the Sun to Earth takes about eight minutes.

Light moves faster than anything else we know. In one second, a beam of light could circle our planet many times. But the Sun is so far away. Even light needs some minutes to cross the gap.

So we see the Sun as it was a few minutes ago. If the Sun went dark, we would not know at once. We would see its light for about eight more minutes.

The Moon is much closer. Moonlight is sunlight that bounced off the Moon. It reaches us in just over a second.

Stars are very far away. Their light takes years to reach us. When you see a star at night, you see light that left long ago. Looking at the sky is a bit like looking back in time.

Questions

1. About how long does sunlight take to reach Earth?

_____

_____

2. What can light do in one second?

_____

_____

3. How long does moonlight take to reach us?

_____

_____

4. What is moonlight?

_____

_____

5. How long does starlight take to reach us?

_____

_____

6. Why is looking at the sky like looking back in time?

_____

_____

Words to know

instant: happening right away, with no waiting
beam: a line or stream of light
gap: an empty space between two things
bounced: hit something and jumped back
planet: a large world that travels around a star

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: _____

Sunlight Takes an Eight Minute Trip

Triangle group

When you feel the warm sunlight on your face, you are feeling light that left the Sun a little while ago. Light is not instant. It has to travel. The trip from the Sun to Earth takes about eight minutes.

Light moves faster than anything else we know about. In just one second, a beam of light could circle our planet many times. Yet the Sun is so far away that even light needs several minutes to cross the gap.

This means we always see the Sun as it was a few minutes ago. If the Sun suddenly went dark, we would not know right away. We would keep seeing its light for about eight more minutes.

The Moon is much closer. Moonlight is really sunlight that bounced off the Moon. It reaches us in just over a second. So the Moon we see is only a moment old.

Stars are far, far away. Their light takes years to reach us. When you look up at a star on a clear night, you see light that started its trip long, long ago. Looking at the sky is a little like looking back in time.

Questions

1. About how long does sunlight take to reach Earth?

_____

_____

2. What can light do in one second?

_____

_____

3. How long does moonlight take to reach us?

_____

_____

4. What is moonlight really?

_____

_____

5. How long does starlight take to reach us?

_____

_____

6. Why does the passage say looking at the sky is like looking back in time?

_____

_____

Words to know

instant: happening right away, with no waiting
beam: a line or stream of light
gap: an empty space between two things
bounced: hit something and jumped back
planet: a large world that travels around a star

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: _____

Sunlight Takes an Eight Minute Trip

Square group

When you feel the warmth of sunlight on your face, you are feeling light that left the Sun some time earlier. Light is not instantaneous; it has to travel, and the journey from the Sun to Earth takes about eight minutes.

Light moves faster than anything else we know about. In a single second, a beam of light could circle our planet many times. Yet the Sun is so extraordinarily distant that even light requires several minutes to cross the gap.

This means we always see the Sun as it was a few minutes ago. If the Sun suddenly went dark, we would not realize it immediately, because we would continue to see its light for about eight more minutes.

The Moon is considerably closer. Moonlight is really sunlight that has bounced off the Moon, and it reaches us in just over a second. Therefore the Moon we see is only a moment old.

Stars are immensely farther away, and their light takes years to reach us. When you gaze at a star on a clear night, you are seeing light that began its trip long, long ago. Looking at the sky is a little like looking back in time.

Questions

1. About how long does it take sunlight to reach Earth?

_____

_____

2. What could a beam of light do in a single second?

_____

_____

3. How long does it take moonlight to reach us?

_____

_____

4. What is moonlight really?

_____

_____

5. How long does it take starlight to reach us?

_____

_____

6. Why does the passage compare looking at the sky to looking back in time?

_____

_____

Words to know

instant: happening right away, with no waiting
beam: a line or stream of light
gap: an empty space between two things
bounced: hit something and jumped back
planet: a large world that travels around a star

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: Sunlight Takes an Eight Minute Trip

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

Circle: Sunlight Takes an Eight Minute Trip

Easier · 164 words · Flesch-Kincaid grade 1.7

1. About eight minutes.
2. Circle our planet many times.
3. Just over a second.
4. Sunlight that bounced off the Moon.
5. Years.
6. The light you see left its star long ago.

Triangle: Sunlight Takes an Eight Minute Trip

This passage · 194 words · Flesch-Kincaid grade 3

1. About eight minutes.
2. Circle our planet many times.
3. Just over a second.
4. Sunlight that bounced off the Moon.
5. Years.
6. The light you see left its star long ago, so you see the star as it was.

Square: Sunlight Takes an Eight Minute Trip

Harder · 200 words · Flesch-Kincaid grade 6.3

1. About eight minutes.
2. Circle our planet many times.
3. Just over a second.
4. Sunlight that has bounced off the Moon.
5. Years.
6. The light you see began its trip from the star long ago, so you see the star as it was.