Name: _____ Date: _____

Is It Almost Noon? Ask the Sundial

Circle group

Long ago, nobody had a clock with batteries. How did people know it was almost noon? Some looked at a sundial.

A sundial has a flat plate with marks around its edge. A thin piece stands up in the middle. It is the gnomon. The word begins with a silent g.

Sunlight hits the gnomon. It makes a dark shadow. The sun seems to travel across the sky. So the shadow slides across the plate. The mark under the shadow is the hour.

A sundial must sit in a sunny spot, such as a garden. It cannot be read at night. It cannot be read when clouds hide the sun. There is no shadow.

Questions

1. Why did people long ago need something like a sundial?

_____

_____

2. What is the thin piece in the middle called?

_____

_____

3. What does the gnomon make when sunlight hits it?

_____

_____

4. Where is the best place for a sundial?

_____

_____

5. When can nobody read a sundial?

_____

_____

6. Why does the shadow slide across the plate?

_____

_____

Words to know

sundial: a tool that uses a shadow to show the time
gnomon: the thin piece on a sundial that makes the shadow
shadow: a dark shape made when something blocks light
plate: a flat piece, like a dish
hour: one of the parts of a day, like one o'clock

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: _____

Is It Almost Noon? Ask the Sundial

Triangle group

Long ago, nobody had a clock with batteries. How did people know if it was almost noon? Some looked at a sundial.

A sundial has a flat plate with numbers or marks around its edge. A thin piece called the gnomon stands up from the middle. The word gnomon begins with a silent g.

Sunlight hits the gnomon and makes a dark shadow. The sun seems to move across the sky. So the shadow slides across the plate. The mark under the shadow is the hour.

A sundial must sit in a sunny spot, such as a garden. It cannot be read at night. Clouds hide the sun, too. Then there is no shadow.

Questions

1. Why did people long ago need something like a sundial?

_____

_____

2. What is the thin piece that points up called?

_____

_____

3. What does the gnomon make when sunlight hits it?

_____

_____

4. Where is the best place for a sundial?

_____

_____

5. When can nobody read a sundial?

_____

_____

6. Why does the shadow slide across the plate?

_____

_____

Words to know

sundial: a tool that uses a shadow to show the time
gnomon: the thin piece on a sundial that makes the shadow
shadow: a dark shape made when something blocks light
plate: a flat piece, like a dish
hour: one of the parts of a day, like one o'clock

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: _____

Is It Almost Noon? Ask the Sundial

Square group

Long ago, nobody owned a clock that ran on batteries. How did people know when it was almost noon? Some of them looked at a sundial.

A sundial has a flat plate with numbers or marks around its edge. A thin piece called the gnomon stands up from the middle, and the word gnomon begins with a silent g.

Sunlight strikes the gnomon and makes a dark shadow. Because the sun seems to travel across the sky, the shadow slowly slides across the plate. The mark beneath the shadow is the hour.

A sundial must be placed in a sunny spot, such as a garden. Nobody can read it at night, and nobody can read it when clouds hide the sun, either, because no shadow forms.

Questions

1. Why did people long ago need something like a sundial?

_____

_____

2. What is the thin piece that stands up in the middle called?

_____

_____

3. What does the gnomon make when sunlight strikes it?

_____

_____

4. Where must a sundial be placed?

_____

_____

5. When can nobody read a sundial?

_____

_____

6. Why does the shadow slowly slide across the plate?

_____

_____

Words to know

sundial: a tool that uses a shadow to show the time
gnomon: the thin piece on a sundial that makes the shadow
shadow: a dark shape made when something blocks light
plate: a flat piece, like a dish
hour: one of the parts of a day, like one o'clock

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: Is It Almost Noon? Ask the Sundial

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

Circle: Is It Almost Noon? Ask the Sundial

Easier · 114 words · Flesch-Kincaid grade 2.3

1. They had no clocks with batteries.
2. The gnomon.
3. A shadow.
4. A sunny spot, like a garden.
5. At night, or when clouds hide the sun.
6. The sun seems to travel across the sky.

Triangle: Is It Almost Noon? Ask the Sundial

This passage · 114 words · Flesch-Kincaid grade 2.7

1. They had no clocks with batteries.
2. The gnomon.
3. A shadow.
4. A sunny spot, like a garden.
5. At night, or when clouds hide the sun.
6. The sun seems to travel across the sky.

Square: Is It Almost Noon? Ask the Sundial

Harder · 126 words · Flesch-Kincaid grade 4.9

1. They did not have clocks that ran on batteries.
2. The gnomon.
3. A dark shadow.
4. In a sunny spot, such as a garden.
5. At night, or when clouds hide the sun.
6. The sun seems to travel across the sky.