Name: _____ Date: _____

The Sundial That Ran an Hour Slow

Circle group

In Fenwick Park stood a stone sundial with a brass pointer. A sign next to it said it had kept good time for a hundred years. So when Odette's watch said ten o'clock and the sundial said nine, she was sure it was broken.

Her brother Cal checked his watch. It said the same as hers. "Maybe the pointer is bent," he said. They looked close. It was straight. "Maybe the stone sank," said Odette. A pencil on top showed the stone was level.

They came back at noon, then at three. Each time, the sundial was behind by the same amount.

"If it was bent or tilted, the mistake would change," Odette said. "This one stays the same. It is always an hour behind."

Cal frowned, and then he smiled. "Last spring, the town moved all the clocks ahead one hour. That gave us more light in the evening. Our watches changed. The sun did not."

Mr. Ames, the gardener, was raking nearby. "That is it," he said. "A sundial follows the sun, not the clock. In autumn, when the clocks go back, they will match again."

Odette wrote the answer on a card and tucked it under the sign.

Questions

1. What did the sign by the sundial say?

_____

_____

2. What did Odette and Cal think might be wrong?

_____

_____

3. How did they check that the stone was level?

_____

_____

4. Why did Odette think the sundial was not bent?

_____

_____

5. What did Cal remember that explained it?

_____

_____

6. Why will the sundial and the clocks match again in autumn?

_____

_____

Words to know

sundial: a clock that uses the sun's shadow to show the time
pointer: the part that points to show something
level: flat and even, not tilted
tilted: leaning to one side
gardener: a person who takes care of plants

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: _____

The Sundial That Ran an Hour Slow

Triangle group

In Fenwick Park stood a stone sundial with a brass pointer, and a sign beside it said that it had kept good time for a hundred years. So when Odette's watch said ten o'clock and the sundial said nine, she was sure that something had broken.

Her brother Cal checked his own watch, and it agreed with hers. "Maybe the pointer is bent," he said, but when they looked closely, it was perfectly straight. "Maybe the stone has sunk," said Odette. A pencil laid across the top showed that the stone was level.

They came back at noon and again at three, and each time the sundial was behind by about the same amount.

"If something were bent or tilted, the mistake would change during the day," Odette said. "This one stays the same, because it is always an hour behind."

Cal frowned, and then his face lit up. "Last spring, the whole town moved its clocks ahead one hour so that we would get more light in the evening. Our watches changed, but the sun did not."

Mr. Ames, the gardener, had been listening while he raked. "That is the answer," he said. "A sundial follows the sun and not the clock, so in the autumn, when the clocks go back, the two will agree again."

Odette wrote the answer on a card and tucked it under the sign.

Questions

1. What did the sign beside the sundial say?

_____

_____

2. What did Odette and Cal first think might be wrong with the sundial?

_____

_____

3. How did they check that the stone was level?

_____

_____

4. Why did Odette think the sundial was not bent or tilted?

_____

_____

5. What did Cal remember that explained the difference?

_____

_____

6. Why will the sundial and the clocks agree again in autumn?

_____

_____

Words to know

sundial: a clock that uses the sun's shadow to show the time
pointer: the part that points to show something
level: flat and even, not tilted
tilted: leaning to one side
gardener: a person who takes care of plants

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: _____

The Sundial That Ran an Hour Slow

Square group

In Fenwick Park stood a stone sundial with a brass pointer, and a sign beside it proudly declared that it had kept accurate time for a hundred years. So when Odette's watch read ten o'clock and the sundial insisted that it was only nine, she was convinced that something had broken.

Her brother Cal checked his own watch, which agreed with hers. "Maybe the pointer is bent," he said, but when they examined it closely, it proved to be perfectly straight. "Maybe the stone has sunk," said Odette, yet a pencil laid across the top demonstrated that the stone was level.

They returned at noon and again at three, and each time the sundial lagged behind by roughly the same amount.

"If something were bent or tilted, the mistake would change during the day," Odette reasoned. "This one never changes, because it is always exactly an hour behind."

Cal frowned, and then his face brightened. "Last spring, the entire town moved its clocks ahead one hour so that everyone would enjoy more daylight in the evening. Our watches changed, but the sun certainly did not."

Mr. Ames, the gardener, had been listening while he raked the path. "That is precisely the answer," he said. "A sundial follows the sun rather than the clock, so in the autumn, when the clocks are set back, the two will agree again."

Odette wrote the answer on a card and tucked it under the sign.

Questions

1. What did the sign beside the sundial claim?

_____

_____

2. What did Odette and Cal first suspect was wrong with the sundial?

_____

_____

3. How did they prove that the stone was level?

_____

_____

4. Why did Odette conclude that the sundial was not bent or tilted?

_____

_____

5. What did Cal recall that explained the difference?

_____

_____

6. Why will the sundial and the clocks agree again in autumn?

_____

_____

Words to know

sundial: a clock that uses the sun's shadow to show the time
pointer: the part that points to show something
level: flat and even, not tilted
tilted: leaning to one side
gardener: a person who takes care of plants

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: The Sundial That Ran an Hour Slow

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

Circle: The Sundial That Ran an Hour Slow

Easier · 201 words · Flesch-Kincaid grade 1.6

1. It had kept good time for a hundred years.
2. That the pointer was bent or that the stone had sunk.
3. They put a pencil on top of it.
4. The mistake stayed the same all day and did not change.
5. The town had moved its clocks ahead one hour last spring.
6. The clocks will go back an hour and will match the sun again.

Triangle: The Sundial That Ran an Hour Slow

This passage · 230 words · Flesch-Kincaid grade 4.8

1. That it had kept good time for a hundred years.
2. That the pointer was bent or that the stone had sunk.
3. They laid a pencil across the top.
4. The mistake stayed the same all day instead of changing.
5. The town had moved its clocks ahead one hour last spring.
6. The clocks will go back an hour, so they will match the sun again.

Square: The Sundial That Ran an Hour Slow

Harder · 241 words · Flesch-Kincaid grade 6.8

1. That it had kept good time for a hundred years.
2. That the pointer was bent or that the stone had sunk.
3. They laid a pencil across the top.
4. The mistake never changed during the day.
5. The town had moved its clocks ahead one hour last spring.
6. The clocks will be set back an hour, so they will match the sun once more.