Name: _____ Date: _____

The Shed Code Hidden in the Sundial

Circle group

On the first morning of gardening club, the tool shed was locked. Nobody could find the key. An index card was taped to the combination lock. It was in the teacher's handwriting. It said, "The code is where the shadow falls at nine, ten, and eleven. Do not hurry."

The club stood in a puzzled circle. In the middle of the garden was a stone sundial. Its metal pointer made a thin gray shadow across a ring of carved numbers. "At nine o'clock, the shadow is on seven," said Tavia. She held the card.

"But it is nine fifteen now," said Kofi. "We missed the right time."

"Maybe not," said Tavia. "The clue says nine, ten, and eleven. A sundial only works when the sun is out. We have to wait and watch."

So they waited. They weeded the carrots and watered the lettuce. They kept one eye on the pointer. At ten o'clock, the shadow touched the four. At eleven, it reached the two. Tavia wrote down the digits. She tried 7, 4, 2 on the lock.

Click. The lock sprang open. Everyone cheered. Inside the shed, a second note hung from a rake. It said, "Good gardeners learn to be patient, and the best ones learn to look." The teacher, Ms. Ford, came out from behind the compost bin. She was grinning. She had been there the whole time.

Questions

1. What was taped to the lock on the shed?

_____

_____

2. What tool did the club use to read the code?

_____

_____

3. What code opened the lock?

_____

_____

4. Where was Ms. Ford during the puzzle?

_____

_____

5. Why did the students have to wait until ten and eleven?

_____

_____

6. What lesson did Ms. Ford want the students to learn?

_____

_____

Words to know

sundial: a clock that uses the shadow of the sun to tell time
combination: a set of numbers that opens a lock
carved: cut into a surface such as stone or wood
compost: rotted plant scraps used to feed garden soil

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 Shed Code Hidden in the Sundial

Triangle group

On the first morning of gardening club, the tool shed was locked and nobody could find the key, but an index card taped to the combination lock explained what to do. It was written in the teacher's handwriting, and it read, "The code is where the shadow falls at nine, ten, and eleven. Do not hurry."

The club members stood in a puzzled circle around the stone sundial in the middle of the garden, whose metal pointer cast a thin gray shadow across a ring of carved numbers. "At nine o'clock, the shadow sits on seven," announced Tavia, who was holding the card.

"But it is already nine fifteen," said Kofi. "We have missed the right moment."

"Maybe not," said Tavia. "The clue mentions nine, ten, and eleven, and since a sundial can only tell time while the sun is shining, we have to be patient and keep watching it."

So they waited, weeding the carrot rows and watering the lettuces while keeping one eye on the pointer. At ten o'clock the shadow touched the carved four, and at eleven it reached the two, so Tavia wrote the digits down and tried 7, 4, 2 on the lock.

Click. The shackle sprang open and everyone cheered, and inside the shed a second note dangled from a rake. It said, "Good gardeners learn to be patient, and the best ones learn to look." The teacher, Ms. Ford, emerged from behind the compost bin, grinning, because she had been standing there the entire time.

Questions

1. What was taped to the lock on the tool shed?

_____

_____

2. What tool did the club use to read the code?

_____

_____

3. What was the code that opened the lock?

_____

_____

4. Where was Ms. Ford during the puzzle?

_____

_____

5. Why did the students have to wait until ten and eleven to finish the puzzle?

_____

_____

6. What lesson did Ms. Ford want the students to take from the puzzle?

_____

_____

Words to know

sundial: a clock that uses the shadow of the sun to tell time
combination: a set of numbers that opens a lock
carved: cut into a surface such as stone or wood
shackle: the curved metal bar at the top of a padlock
compost: rotted plant scraps used to feed garden soil

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 Shed Code Hidden in the Sundial

Square group

On the first morning of gardening club, the tool shed was firmly locked and nobody could locate the key anywhere, but an index card that had been taped to the combination lock explained exactly what to do. It was written in the teacher's slanting handwriting, and it read, "The code is where the shadow falls at nine, ten, and eleven. Do not hurry."

The club members stood in a puzzled circle around the stone sundial in the middle of the garden, whose metal pointer cast a thin gray shadow across a ring of carefully carved numbers. "At nine o'clock, the shadow sits on seven," announced Tavia, who was holding the card.

"But it is already nine fifteen," said Kofi. "We have obviously missed the right moment."

"Maybe not," said Tavia. "The clue mentions nine, ten, and eleven, and since a sundial can only tell time while the sun is shining, we simply have to be patient and keep watching it."

So they waited, weeding the carrot rows and watering the lettuces while keeping one eye on the pointer. At ten o'clock the shadow touched the carved four, and at eleven it reached the two, so Tavia carefully wrote the digits down and tried 7, 4, 2 on the lock.

Click. The shackle sprang open and everyone cheered, and inside the shed a second note dangled from a rake. It said, "Good gardeners learn to be patient, and the best ones learn to look." The teacher, Ms. Ford, emerged from behind the compost bin, grinning from ear to ear, because she had been standing there the entire time.

Questions

1. What was taped to the combination lock on the tool shed?

_____

_____

2. What instrument did the club use to read the code?

_____

_____

3. What was the code that opened the lock?

_____

_____

4. Where was Ms. Ford during the puzzle?

_____

_____

5. Why did the students have to wait until ten and eleven to finish the puzzle?

_____

_____

6. What lesson did Ms. Ford hope the students would take from the puzzle?

_____

_____

Words to know

sundial: a clock that uses the shadow of the sun to tell time
combination: a set of numbers that opens a lock
carved: cut into a surface such as stone or wood
shackle: the curved metal bar at the top of a padlock
compost: rotted plant scraps used to feed garden soil

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 Shed Code Hidden in the Sundial

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

Circle: The Shed Code Hidden in the Sundial

Easier · 228 words · Flesch-Kincaid grade 2.4

1. An index card with a clue about a shadow.
2. A stone sundial in the garden.
3. 7, 4, 2.
4. Behind the compost bin, watching.
5. The shadow moves to the next number as time passes, so they could not read it all at once.
6. That patience and careful looking help solve problems.

Triangle: The Shed Code Hidden in the Sundial

This passage · 249 words · Flesch-Kincaid grade 6.9

1. An index card with a clue about a shadow.
2. A stone sundial in the garden.
3. 7, 4, 2.
4. Behind the compost bin, watching.
5. The shadow only moves to the next number as time passes, so they could not read it all at once.
6. That patience and careful observation help solve problems.

Square: The Shed Code Hidden in the Sundial

Harder · 264 words · Flesch-Kincaid grade 7.7

1. An index card with a clue about a shadow.
2. A stone sundial in the garden.
3. 7, 4, 2.
4. Behind the compost bin, watching.
5. The shadow only advances to the next number as time passes, so they could not read the whole code at once.
6. That patience and careful observation help solve problems.