

Chasing Shade Patterns

Find a repeating change and see how it solves a problem.

2.5.A "identify and use patterns to describe phenomena or design solutions;"

NAME _____

DATE _____

1 READ AND MARK _____ Read it twice

YOUR JOB Underline the words that show the shade changing, and circle the words that tell how the class used this pattern to solve a problem.

The Flagpole Shade

- ① At Willow School, Mia watched the shade from the flagpole during one sunny morning. At 9 o'clock, the shade reached across the path. At 10 o'clock, it was shorter. At 11 o'clock, it was shorter again.
- ② Mia saw a pattern. As the morning went on, the shade became shorter. The Sun seemed to move higher in the sky, so the flagpole blocked sunlight in a different place. This repeating change helped Mia describe the moving shade.
- ③ The class wanted a cool place for reading outside. They used Mia's pattern to choose a spot. At morning reading time, they put a bench where the flagpole's long shade reached. The pattern helped them design a shady reading place.

2 ANSWER WITH EVIDENCE Use the passage

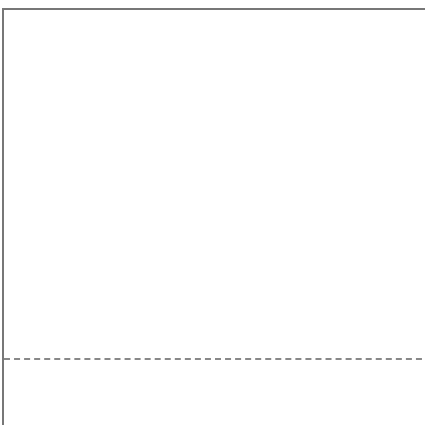
1 Describe the shade pattern Mia saw from 9 o'clock to 11 o'clock.

2 What caused the shade to change places and become shorter?

3 How did the class use the shade pattern to solve a problem?

3 YOUR TURN Your own words

Draw three panels to show the shadow of one object in the morning, at noon, and in the afternoon. Then write one sentence that describes the pattern and tells where you would place a lunch table to get shade.

		
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PART 1 • READ AND MARK

Underline the words that show the shade changing, and circle the words that tell how the class used this pattern to solve a problem. Accept any marking that follows this job and points at the right text.

PART 2 • ANSWERS

#	QUESTION	ANSWER
1	Describe the shade pattern Mia saw from 9 o'clock to 11 o'clock.	The shade was long at 9 o'clock, shorter at 10 o'clock, and shorter again at 11 o'clock.
2	What caused the shade to change places and become shorter?	The Sun seemed to move higher in the sky, so the flagpole blocked sunlight in a different place.
3	How did the class use the shade pattern to solve a problem?	They put a reading bench where the flagpole's long morning shade reached so students could have a cool place.

PART 3 • YOUR TURN (SAMPLE ANSWER)

Panel 1: Morning, a tree has a long shadow. Panel 2: At noon, the tree has a short shadow. Panel 3: Afternoon, the tree has a long shadow on the other side. The shadow is shortest at noon, so I would put the lunch table on the shaded side of the tree in the morning.

Accept any accurate three-time shadow pattern, including a long morning shadow, a shorter noon shadow, and a long afternoon shadow in a different direction. The lunch-table location should match a shaded area shown or described by the student.