

Track That Ball

Read how position and direction show motion.

SC.4.P.12.1 "Recognize that an object in motion always changes its position and may change its direction."

NAME _____

DATE _____

1 READ AND MARK _____ Read it twice

YOUR JOB Underline each sentence that tells how the ball changed position. Circle the words that tell when or where its direction changed.

The Recess Roll

- ① During recess, Maya rolled a soccer ball from the bench to the water fountain. At first, the ball was beside the bench. A few seconds later, it was near the fountain. The ball was in motion because its position changed. Position tells where an object is compared with a place, such as a bench, wall, or tree.
- ② Then the ball bumped the fountain base and rolled toward a tree. Its direction changed at the fountain because it began moving along a new path. The ball still changed position as it traveled toward the tree. An object can keep moving in one direction, or it can turn, but it changes position while it is in motion.
- ③ The ball reached the tree and stopped in the grass. While it was stopped, its position did not change. Maya kicked it again, and it moved from the tree toward the playground gate. This new motion changed the ball's position again. Watching where an object is at different times helps you decide whether it is moving or staying still.

2 ANSWER WITH EVIDENCE _____ Use the passage

1 How did Maya know the ball was in motion at the start of its roll?

2 Where did the ball change direction, and where did it roll next?

3 Did the ball's position change while it was stopped in the grass? Use evidence from the passage.

4 What can you watch at different times to decide whether an object is moving?

3 YOUR TURN _____ Your own words

Draw a ball, toy car, or another object in the three panels. Show its starting place, a place where it changes direction, and its ending place. Then write one sentence telling how its position changed and when its direction changed.

		
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PART 1 • READ AND MARK

Underline each sentence that tells how the ball changed position. Circle the words that tell when or where its direction changed. Accept any marking that follows this job and points at the right text.

PART 2 • ANSWERS

#	QUESTION	ANSWER
1	How did Maya know the ball was in motion at the start of its roll?	Its position changed from beside the bench to near the water fountain.
2	Where did the ball change direction, and where did it roll next?	It changed direction at the fountain and rolled toward the tree.
3	Did the ball's position change while it was stopped in the grass? Use evidence from the passage.	No. The passage says its position did not change while it was stopped.
4	What can you watch at different times to decide whether an object is moving?	Watch where the object is, or its position, at different times.

PART 3 • YOUR TURN (SAMPLE ANSWER)

Panel 1: A toy car is beside a chair. Panel 2: The toy car turns at a table. Panel 3: The toy car is near a door. The toy car changed position from the chair to the door, and it changed direction at the table.

Accept any accurate explanation that an object in motion changes position. For the open task, accept any clear three-part sketch and sentence that identify both a position change and a direction change.