Name: Date: Score: / 8

Patterns of Motion: Learn and Practice

Spot the pattern and predict what comes next

Read each question. Circle the best answer.

💡 Patterns of Motion

- Some objects move in a pattern that repeats.
- A swing moves back and forth again and again.
- When we see a pattern, we can predict what comes next.
- swing goes forward, back, forward: next is back

1 How does a playground swing move?

A. Back and forth B. Straight up and down

C. Only in a straight line D. Round in a big circle

2 🏀 A ball bounces high, then a bit lower, then lower again. The next bounce will be...

A. Much higher B. Lower still

C. Exactly as high as the first

D. Straight sideways

3 A pendulum swings left, then right, then left. Where will it go next?

A. Right B. Left again C. Nowhere

D. Up into the air

4 Which of these moves in a repeating pattern?

A. A child on a swing B. A parked car

C. A rock on the ground D. A sleeping cat

5 Which toy spins round and round in one spot?

A. A spinning top B. A falling leaf

C. A thrown ball D. A sliding sled

6 Which motion pattern does a merry go round have?

A. Bouncing up and down

B. Zigzag across the park C. Back and forth

D. Going round in a circle

7 A pendulum is a weight on a string. You pull it to one side and let go. What does it do?

A. Stays perfectly still B. Falls off the string

C. Flies straight up D. Swings back and forth

8 Why can we predict where a swing will go next?

A. It moves randomly B. It never moves

C. Its motion repeats D. It is very colorful

✏️ Explain it! Write two facts you learned about patterns of motion.

ANSWER KEY

Patterns of Motion: Learn and Practice (answers)

Spot the pattern and predict what comes next

Read each question. Circle the best answer.

1 How does a playground swing move?

A. Back and forth B. Straight up and down

C. Only in a straight line D. Round in a big circle

A swing moves back and forth in a repeating pattern. That pattern helps us predict where it goes next.

2 🏀 A ball bounces high, then a bit lower, then lower again. The next bounce will be...

A. Much higher **B. Lower still**

C. Exactly as high as the first

D. Straight sideways

Each bounce loses a little energy, so the pattern shows the bounces getting lower and lower.

3 A pendulum swings left, then right, then left. Where will it go next?

A. Right B. Left again C. Nowhere

D. Up into the air

The pattern is left, right, left, right. So the next swing is to the right. Great predicting!

4 Which of these moves in a repeating pattern?

A. A child on a swing B. A parked car

C. A rock on the ground D. A sleeping cat

The swing goes back and forth over and over. The others are not moving at all.

5 Which toy spins round and round in one spot?

A. A spinning top B. A falling leaf

C. A thrown ball D. A sliding sled

A spinning top turns in circles in the same place. Spinning is a kind of motion pattern.

6 Which motion pattern does a merry go round have?

A. Bouncing up and down

B. Zigzag across the park C. Back and forth

D. Going round in a circle

A merry go round turns around its center again and again, so it moves in a circle.

7 A pendulum is a weight on a string. You pull it to one side and let go. What does it do?

A. Stays perfectly still B. Falls off the string

C. Flies straight up **D. Swings back and forth**

Gravity pulls the weight down and it swings past the middle, then back again. That is a pendulum pattern.

8 Why can we predict where a swing will go next?

A. It moves randomly B. It never moves

C. Its motion repeats D. It is very colorful

Because the swing repeats the same back and forth path, we can tell what it will do next.