Forces and Motion

Grade 3 Science Worksheet

PencilGo

Name _____ Date _____

Circle the answer.

1. Team A pulls a rope with 50 units of force. Team B pulls with 70 units. What happens?

   the rope moves toward Team A

   the rope breaks in the middle

   the rope moves toward Team B

   the rope stays still

2. Which is an example of balanced forces?

   a book resting on a table

   a wagon speeding up when pulled

   a kicked ball changing direction

   a ball rolling faster down a hill

3. A ball is dropped from 1 meter and from 2 meters. Which one is moving faster when it lands?

   the ball from 2 meters both at the same speed the ball from 1 meter

   neither, they float down

4. A wagon is pulled forward hard. Friction on the wheels is small. What happens to the wagon?

   it moves backward it slows down it stays still it speeds up

5. A soccer player stops a rolling ball with her foot. What did her foot do?

   made the ball lighter

   added speed to the ball

   pushed against the ball's motion

   took gravity away from the ball

6. A child on a swing is pushed once and swings back and forth. Which pattern helps predict where the swing will be?

- it goes to one side, then the other, over and over
- it goes higher with every swing
- it swings in one direction only
- it stops after one swing

7. A box is pushed with 10 units of force from the left and 10 units from the right. What happens?

- it moves left, because the left push wins
- it moves right, because the right push wins
- it stays still, because the forces are balanced
- it moves up, because the forces meet

8. A box is pushed with 15 units from the left and 5 units from the right. Which way does it move?

it stays still to the left to the right it spins in place

9. A ball rolls across a floor and slowly stops. Why?

- friction from the floor slows it
- air pushes it to the side
- the ball runs out of push inside it
- gravity pushes it backward

10. A pendulum takes 2 seconds to swing over and back. How long will 3 swings over and back take?

2 seconds 6 seconds 3 seconds 5 seconds

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Answer Key - Grade 3 Science Worksheet

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