Forces and Motion

Grade 3 Science Worksheet - Challenge Me

Name _____ Date _____

Circle the answer.

1. A book sits on a table. Gravity pulls it down. Why doesn't it fall?

   gravity stops working on tables

   the table pushes up with an equal force

   the book has no weight on a table

   air holds the book up

2. Team A and Team B each pull a rope with 60 units of force. A third child joins Team A and adds 10 units. What happens?

   the rope moves toward Team B

   the forces stay balanced

   the rope moves toward Team A

   the rope stays still

3. A toy car rolls 50 cm on carpet and 200 cm on tile with the same push. What is the best explanation?

   carpet has more friction than tile

   the car is heavier on carpet

   gravity is stronger on carpet

   tile has more friction than carpet

4. A student pushes a box with 10 units of force, and friction pushes back with 10 units. She wants the box to move. What should she do?

   push with exactly 10 units

   push with more than 10 units

   push from both sides at once

   push with less than 10 units

5. A ball rolls back and forth in a bowl. It reaches 10 cm, then 8 cm, then 6 cm, then 4 cm up the side. Predict the next height.

   10 cm 2 cm 4 cm 6 cm

6. A kite stays still high in the sky. The wind pushes it and the string pulls it. What does this tell you?

only the wind is pushing the kite

the string pulls harder than the wind

the forces on the kite are balanced

gravity has stopped pulling the kite

7. A hockey puck slides a long way on ice but still slows down a little. Why?

there is a small amount of friction

gravity pushes it backward

ice has no friction at all

the puck runs out of force

8. Two equal pushes act on a box from opposite sides. Then one push stops. What happens?

the box moves straight up

the box stays still

the box moves the way the other push points

the box moves toward the push that stopped

9. A box has 20 units of force pushing right and 12 units of friction pushing left. Which way does it move, and how much extra force is there?

it stays still left, with 8 extra units right, with 8 extra units

right, with 32 extra units

10. A cart is still while two students push from opposite sides. Then one pushes harder. What happens?

the cart moves sideways

the cart moves away from the harder push

the cart moves toward the harder push

the cart stays still

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Answer Key - Grade 3 Science Worksheet - Challenge Me

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