# Forces and Motion

Grade 3 Science Worksheet - Challenge Me

Name _____ Date _____

Circle the answer.

1. 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.
   6 cm  10 cm  4 cm  2 cm

2. A kite stays still high in the sky. The wind pushes it and the string pulls it. What does this tell you?
   the string pulls harder than the wind
   gravity has stopped pulling the kite
   the forces on the kite are balanced
   only the wind is pushing the kite

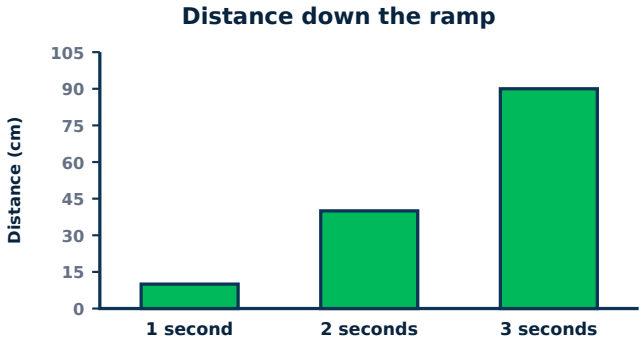
3. A hockey puck slides a long way on ice but still slows down a little. Why?
   there is a small amount of friction
   the puck runs out of force
   gravity pushes it backward
   ice has no friction at all

4. Two equal pushes act on a box from opposite sides. Then one push stops. What happens?
   the box moves toward the push that stopped
   the box stays still
   the box moves the way the other push points
   the box moves straight up

5. 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?
   right, with 32 extra units  it stays still  left, with 8 extra units  right, with 8 extra units

6. A cart is still while two students push from opposite sides. Then one pushes harder. What happens?
   the cart moves sideways
   the cart stays still
   the cart moves toward the harder push
   the cart moves away from the harder push

7. A ball rolls down a ramp. Use the graph of how far it has gone after each second. What does the pattern show?




the ball slows down
the ball stops after 2 seconds
the ball moves at the same speed
the ball speeds up as it rolls down

8. A sled slides down a snowy hill onto flat ground. On which surface would it stop soonest?
smooth ice
packed snow
it would stop the same on each
a patch of sand

9. A book sits on a table. Gravity pulls it down. Why doesn't it fall?
the table pushes up with an equal force
the book has no weight on a table
air holds the book up
gravity stops working on tables

10. 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 stays still
the rope moves toward Team A
the rope moves toward Team B
the forces stay balanced

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Answer Key - Grade 3 Science Worksheet - Challenge Me

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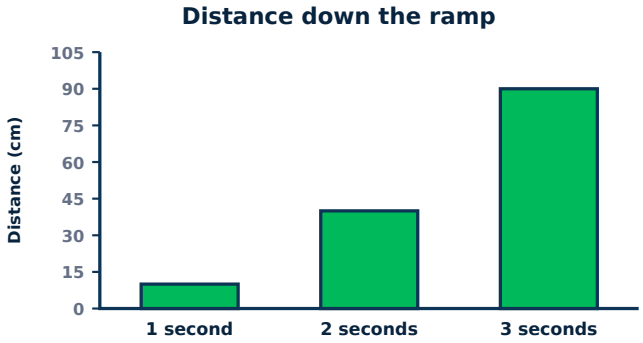
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