

Nova's Forces Fun Quiz

Learning objective: To identify and describe the effects of forces including friction, air resistance, and magnetism.

Join Nova the Barn Owl on a flight through the world of forces! Read each question carefully and circle the correct answer or write your answer clearly on the line provided.

Answer Key: 1. C (Force), 2. False, 3. Friction, 4. B (Air resistance), 5. True, 6. Attract, 7. A (Gravity), 8. False, 9. Magnetism, 10. True.

Word bank: Friction · Magnetism · Air resistance · Gravity · Surface · Force · Repel · Attract

1. 1. What is a push or a pull acting on an object? A) A speed B) A weight C) A force* D) A balance (1 mark)

2. 2. True or False: Rough surfaces create less friction than smooth surfaces. (1 mark)

3. 3. Which force acts in the opposite direction to an object moving across a floor? (1 mark)

4. 4. What is the name of the force that acts on an object moving through the air? A) Magnetism B) Air resistance* C) Gravity D) Friction (1 mark)

5. 5. True or False: Gravity is a force that pulls objects towards the centre of the Earth. (1 mark)

6. 6. Fill in the blank: Opposite poles of two magnets will _____ each other. (1 mark)

7. 7. Which of these is a non-contact force? A) Gravity* B) Pushing a trolley C) Kicking a ball D) Lifting a bag (1 mark)

8. 8. True or False: All metals are magnetic. (1 mark)

9. 9. What is the name of the force that allows a fridge magnet to stick to a metal door? (1 mark)

10. 10. True or False: A force can change the shape of an object, like stretching a rubber band. (1 mark)

Draw: Draw a picture of a toy car rolling down a ramp. Use arrows to show the direction of the car's movement and label where 'friction' is happening.



Extension challenge: Nova wants to know: If you were sliding on ice, why would you move faster than if you were sliding on a carpet? Write two sentences explaining your ideas using the word 'friction'.