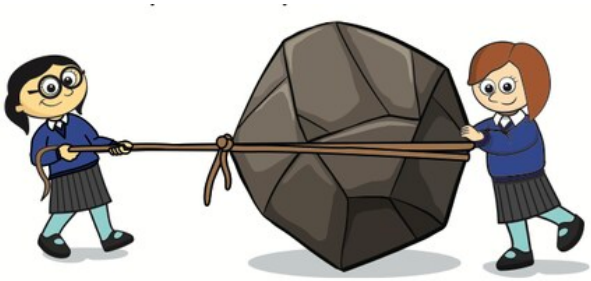
socrative
A showbie PRODUCT

Name _____
Date _____

Year 3/4 - Forces and Magnets

Score _____

1.



What are the two types of forces introduced in this lesson?

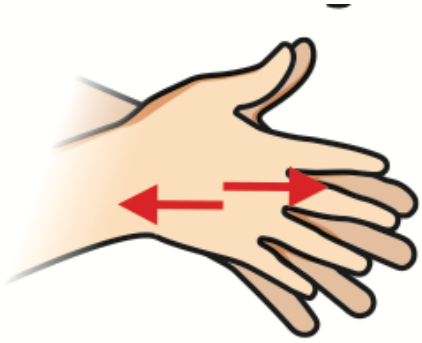
(A) Friction and gravity

(B) Push and pull

(C) Magnetism and electricity

(D) Heat and light

2. True or False: A contact force is a push or pull that affects objects which are not touching.



(T) True

(F) False

3. Which of the following is an example of a pull force?

(A) Opening a drawer

(B) Pushing a door closed

(C) Kicking a ball

(D) Throwing a frisbee

4. What is friction?

(A) A contact force that pushes against a moving object

(B) A push force

(C) A force that only works on smooth surfaces

(D) A pull force

5. Which type of surface typically has higher friction?

(A) Plastic

(B) Carpet

(C) Wood

(D) Ice

6. True or False: Friction can stop or slow down a moving object.

(T) True

(F) False

7. In the friction experiment, what is the independent variable (what will change)?

(A) The force used to push the car

(B) The type of car used

(C) The height of the ramp

(D) The material on the surface of the ramp

8.

What will be measured in this experiment?

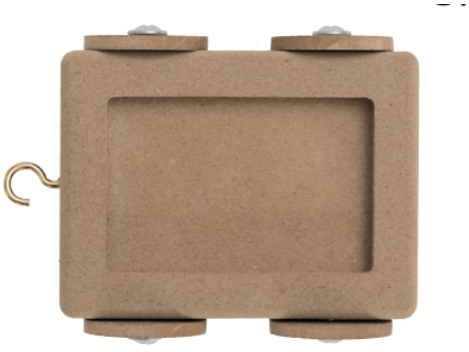
(A) The speed of the car

(B) The weight of the car

(C) The time it takes for the car to stop

(D) The distance the car travels from the end of the ramp

9. Which of these is NOT a control variable in the friction experiment?



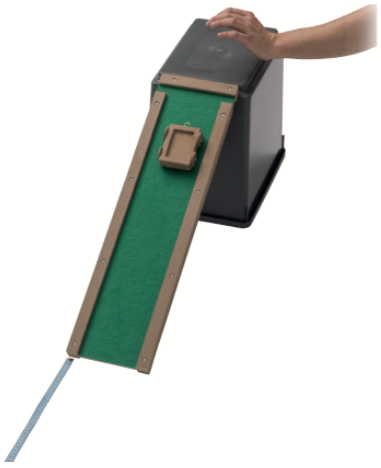
(A) The starting point of the car

(B) The material on the surface of the ramp

(C) The type of car used

(D) The height of the ramp

10. Why is it important to release the car at the top of the ramp rather than pushing it?



(A) It's safer for the children

(B) It keeps the force consistent and doesn't affect the results

(C) It makes the car go faster

(D) It's easier to do

11. On which surface would you expect the toy car to travel the furthest?

(A) Wood

(B) Grass

(C) Sandpaper

(D) Carpet

12.

Surface	Distance travelled (cm)
wood	84
sandpaper	76

True or False: An object will move less far on a rough surface due to more friction between the object and the surface.

(T) True

(F) False

13. What type of force is a magnetic force?

(A) A pulling force

(B) A pushing force

(C) A non-contact force

(D) A contact force

14.

How many poles does a magnet have?

(A) One

(B) Three

(C) Four

(D) Two

15. True or False: All magnets have the same strength.

(T) True

(F) False

16. Which of these materials is NOT magnetic?

(A) Iron

(B) Plastic

(C) Steel

(D) Nickel

17. True or False: When testing if a material is magnetic, it matters which pole of the magnet you use.

(T) True

(F) False

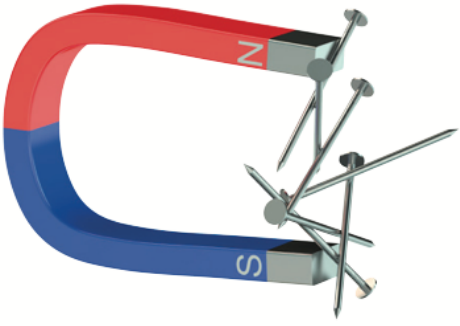
18. What happens when you bring a magnet close to a magnetic material?

(A) The material is repelled

(B) Nothing happens

(C) The material disappears

(D) The material is attracted



19. Which of these metals is NOT magnetic?

(A) Nickel

(B) Steel

(C) Iron

(D) Aluminium

20. True or False: All metals are magnetic.

(T) True

(F) False

21. What is the best way to test if a metal is magnetic?

(A) Weigh it

(B) Feel its texture

(C) Try to attract it with a magnet

(D) Look at its color

22.

What happens when you bring the north pole of one magnet close to the south pole of another magnet?

(A) They cancel each other out

(B) They attract

(C) Nothing happens

(D) They repel

23.

What happens when you bring two north poles of different magnets together?

(A) They repel

(B) Nothing happens

(C) They stick together permanently

(D) They attract

24. True or False: Repulsion only occurs between two magnets, not between a magnet and a magnetic material.

(T) True

(F) False