

WORKSHEET

Class: 8

Topic: FORCE & PRESSURE
FRICTION

Subject: SCIENCE

MULTIPLE CHOICE QUESTIONS - FORCE & PRESSURE

1. During dry weather, while combing hair, sometimes we experience hair flying apart. The force responsible for this is

- (A) force of gravity.
- (B) electrostatic force.
- (C) force of friction.
- (D) magnetic force.

2. A brick is kept in three different ways on a table as shown in Fig. The pressure exerted by the brick on the table will be



A



B



C

- (A) maximum in position A
- (B) maximum in position B
- (C) maximum in position C
- (D) equal in all cases.

3. The S.I unit of pressure is -

- A) Newton
- B) metre²
- C) N/m²
- D) m²/ N

4. Determine the pressure when the force of 200N acts on area of 20m².

- A) 200Pa
- B) 1/10 Pa
- C) 0.002Pa
- D) 10Pa

5. The pressure exerted by liquid due to increase in depth -

- A) reduces
- B) increases
- C) remains same
- D) depends on the nature of the liquid

6. Which of these following forces is a contact force?

- A) gravitational force
- B) frictional force
- C) magnetic force
- D) electrostatic force

7. A ball rolling on the ground slows down and finally stops because of –

- (A) force
- (B) less force applied
- (C) friction
- (D) none of the above

8. A student investigated the relationship between the weight of a block and the friction between it and the surface. As he added weights to the block, he found that the force needed to move the block

- A. increase
- B stays the same

- C. Decreases D. No change

9. A boy is cycling along a road. When he applies the brakes, which one of the following forces occurs between the



brake pads and the wheels.

- A. Gravity
- B. Magnetic
- C. Friction
- D. Stretching

10. The atmospheric pressure on top of Mount Everest is less than that at sea level because



- A. there is more snow on Mount Everest.
- B. there is less oxygen on top of Mount Everest.
- C. it is colder on Mount Everest.
- D. there is less air on top of Mount Everest.

Fill in the blanks

- a. An example of a non-contact force is _____.
- b. The pressure exerted by air around us is known as _____.
- c. SI unit of force is _____.
- d. Application of force can change the _____ or _____ of an object.
- e. Force exerted by our muscles is called _____ force.
- f. Direction of force of friction is always _____ to the direction of motion.
- g. Force per unit area is called _____.
- h. The force exerted by a charged body on another charged or uncharged body is known as _____.

True and false

- a. Friction opposes the relative motion between two surfaces in contact.
- b. A force can act on an object with or without being in contact with it.
- c. Gases does not exert pressure on the walls of their container
- d. The force exerted by a charged body on another charged or uncharged body is known as gravitational force.

FRICION

MULTIPLE CHOICE QUESTIONS

1. The force of friction that comes into play when one body rolls over another surface, is

- (a) sliding friction
- (b) limiting friction
- (c) rolling friction
- (d) static friction

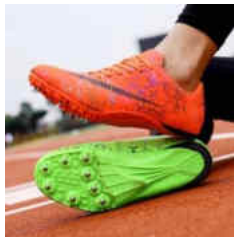
2. Whenever the surfaces in contact tend to move or move with respect to each other, the force of friction comes into play

- (a) only if the objects are solid.
- (b) only if one of the two objects is liquid.
- (c) only if one of the two objects is gaseous.
- (d) irrespective of whether the objects are solid, liquid or gaseous.

3. A toy car released with the same initial speed will travel farthest on

- (a) muddy surface
- (b) polished marble surface
- (c) cemented surface
- (d) brick surface

4. Why sportsmen use shoes with spikes? Choose the correct statement.



- A) It helps to increase friction on the ground.
- B) In order to avoid getting slip.
- C) makes a proper grip on the ground.
- D) all of the above.

5. We can increase friction by

- A) Polishing
- B) making grooves
- C) Streamlining
- D) using ball bearing.

6. Which of the following statements is incorrect?

- (a) Friction acts on a ball rolling along the ground.
- (b) Friction acts on a boat moving on water.

