

Name: \_\_\_\_\_ Date: \_\_\_\_\_

Force and Pressure

Q1. Why the straps of school bags are made broader?

Ans. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Q2. A small device pulls iron nails from a distance. Which type of force is involved in this process?

Ans. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Q3. Write one example where force changes the direction of a moving object.

Ans. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Q4. Explain why, frictional force is said to be a contact force.

Ans. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Q5. In a tug of war; when the two teams are pulling the rope, a stage comes when the rope does not move to either side at all. What can you say about the magnitudes and directions of the forces being applied to the rope by the two teams at this stage?

Ans. \_\_\_\_\_  
\_\_\_\_\_

## Force and Pressure

Q1. Why the straps of school bags are made broader?

Ans. Shoulder bags are provided with broad straps and not thin strap so that the weight of the bag may fall over a large area of the shoulder of the child producing less pressure on the shoulder.

Q2. A small device pulls iron nails from a distance. Which type of force is involved in this process?

Ans. Magnetic force is involved in this process. The magnetic force acts even from a distance. The magnet exerts a magnetic force on objects made of iron, steel, nickel and cobalt.

Q3. Write one example where force changes the direction of a moving object.

Ans. In cricket, a batsman plays his or her shot by applying a force on the ball with the bat. In this example the speed and the direction of the moving ball change due to the application of a force.

Q4. Explain why, frictional force is said to be a contact force.

Ans. The force of friction always acts on all the moving objects and its direction is always opposite to the direction of motion. Since the force of friction arises due to contact between surfaces, it is an example of a contact force.

Q5. In a tug of war; when the two teams are pulling the rope, a stage comes when the rope does not move to either side at all. What can you say about the magnitudes and directions of the forces being applied to the rope by the two teams at this stage?

Ans. If there is no movement on either side, the force applied from both side is equal in magnitude.