

St. Andrews Scots Sr. Sec. School

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Class VIII (Session: 2026-2027)

Worksheet-5

Subject: Science

Chapter: Exploring Forces

Q.1. Define these terms:

- a) Buoyant force
- b) Weight
- c) Balanced force

Q.2. Fill in the blanks:

- a) The strength of a force is usually expressed by its _____.
- b) The body at rest is called _____ body.
- c) Force has _____ as well as direction.
- d) We apply force on _____ while walking.
- e) Force acting on a body can change its _____ and state of motion.

Q.3. Multiple Choice Questions:

Tick (✓) the correct options:

- a) One kilogram weight is equal to
 - (i) 98 N
 - (ii) 9.8 N
 - (iii) 0.98 N
 - (iv) 0.098 N
- b) A spring balance is used for measuring
 - (i) mass
 - (ii) weight
 - (iii) pressure
 - (iv) speed
- c) Two boys A and B are applying force on a block. If the block moves towards the boy A, which one of the following statements is correct?
 - (i) Magnitude of force applied by A is greater than that of B.
 - (ii) Magnitude of force applied by A is smaller than that of B.

- (iii) Net force on the block is towards B.
 - (iv) Magnitude of force applied by A is equal to that of B.
- d) The strength of force is expressed by its
- (i) weight
 - (ii) mass
 - (iii) magnitude
 - (iv) longitudinal force
- e) When the hammer strikes the gong of an electric bell, which of the following force is responsible for the movement of hammer?
- (i) Gravitational force alone
 - (ii) Magnetic force alone
 - (iii) Electrostatic force alone
 - (iv) Frictional force alone

Q.3. Very Short Questions:

- a) Give one example where force moves a stationary object.
- b) Which force can be used to gather iron pins scattered on the floor?
- c) Which force do animals apply while moving, chewing, and doing other activities?
- d) Why does the shape of a toothpaste tube change when we squeeze it?

Q.4. Answer the following Questions:

- a) How can we change the speed and direction of a moving body?
- b) While sieving grains, small pieces fall down. Which force pulls them down?
- c) Give two examples of situations in which the applied force causes a major change in the shape of an object.
- d) An archer stretches her bow while taking aim at a target. She then releases the arrow. Identify the types of forces involved.
- e) Explain why a ball rolling along the ground gradually slows down and finally comes to rest.