



**STEPPING STONE
SCHOOL (HIGH)**

Class 4

Chapter 11

Force

Exercises :-

Exercises

A. Tick (✓) the correct answer.

1. b. Tug of war
3. d. Frictional force

2. a. Gravitational force
4. c. Boat not sinking in water

B. Fill in the blanks.

1. frictional

2. magnetic

3. force

C. State whether the following statements are true or false.

1. False

2. False

3. True

D. Give one word for the following statements.

1. Gravitational force

2. Magnetic force

3. Buoyancy

4. Friction

E. Give a reason for the following statements.

1. Gravitational force

2. Fluid friction

F. Answer the following questions in brief.

1. The push or pull acting on an object is called force.
2. Opposing force that tries to or stops the motion of an object.
3. The force by which the Earth attracts all the objects towards itself.
4. The force by which the Earth attracts all the objects towards itself is called gravitational force. When we throw a ball up in the sky, it stops after going to some height and then starts coming down towards the Earth. This happens because of the gravitational force.
The force with which a magnet attracts certain materials like iron, nickel, etc., towards itself is called magnetic force. The door of a refrigerator closes automatically when it comes in contact with the magnetic strip placed on the inside of the refrigerator.

G. Answer the following questions in detail.

1. When we perform any action using force, we see its effect. The various effects of force are discussed below.
 - Force can move a stationary object: When we push or pull a shopping cart, we change its position and it starts moving in the direction of force.
 - Force can stop a moving object: When we catch a ball, our hands apply force to stop the ball.
 - Force can change the direction of a moving object: When a player kicks the ball coming towards him, he changes the direction of the movement of the ball.
 - Force can change the shape of an object: When we apply force on a ball of clay and make different things out of it, we change the shape of the clay using force.
2. We change the shape of the dough to make chapattis by applying force, a batsman hits the ball for four or six by applying force on the ball, a driver stops a vehicle by applying force on the brakes, we open or close a door or a drawer using force.

Examples of Push:

- Pushing a door
- Pushing a shopping cart

- Closing a drawer
- Kicking a football

Examples of Pull:

- Opening a drawer
- Pulling a cart

- Putting on a sock
- Tightening shoelaces