

Name: _____ Date: _____

Force and Pressure

Q1. Give two examples of situations in which applied force causes a change in the shape of an object.

Ans. _____

Q2. What are the various effects of force?

Ans. _____

Q3. Why a fountain of water is created at the leaking joints or holes of pipes of the main water supply line?

Ans. _____

Q4. How does a liquid medicine enter a syringe?

Ans. _____

Force and Pressure

Q1. Give two examples of situations in which applied force causes a change in the shape of an object.

Ans. Two examples in which applied force causes a change in the shape of an object are:

- i. The shape of dough changes on pressing with rolling pin to make chapatis.
- ii. The shape of a toothpaste tube changes when we squeeze it.

Q2. What are the various effects of force?

Ans. Effects of force are:

- i. It may make an object move from rest.
- ii. It may change the speed of an object if it is moving.
- iii. It may change the direction of motion of an object.
- iv. It may bring about a change in the shape of an object.

Q3. Why a fountain of water is created at the leaking joints or holes of pipes of the main water supply line?

Ans. Many times we see a fountain of water rushing out of the leaking joints (or holes) in the pipes of main water supply line. It is due to the very high pressure exerted by water on the sides (or walls) of the pipes that such a fountain of water is formed.

Q4. How does a liquid medicine enter a syringe?

Ans. When the nozzle of a syringe is dipped in a liquid and its piston is withdrawn, the pressure inside the syringe is lowered. The greater atmospheric pressure acting on the surface of the liquid pushes the liquid up into the syringe.