

Chapter - 3 FORCE

Book Exercise

- B. 1. Force is the term used for the push or pull.
2. (i) a push: to open a door, we push it.
(ii) a pull: to move a ~~but~~ cart, it is pulled by a bull. the ~~of~~ push or pull
3. ~~A~~ A force is ~~that~~ ~~cause~~, which changes the state of a body (either the state of rest or the state of motion or the direction of ~~the~~ motion) or changes the size or shape of the body.

4. Force can move a body originally at rest.

Homework

1. ~~A~~ Force is a push or pull which can change the state of rest or motion of the body or can change the size and shape of the body (i.e. it can deform a body).

2. (i) a push: to move a pile of rubbish, it is pushed by a broom.

(ii) a pull: to move a grass roller on a lawn, it is pulled by a gardener.

3. When a force is applied on a body, the shape or size of the body changes. For eg: on ~~stretch~~ stretching a rubber string, its length increases.

~~At~~ One end of a spring is tied to a hook and the other end is pulled down by suspending a body, its length increases.

Through this example, we ~~conclude~~ conclude that the size of an object ~~change~~ changes when force is applied ~~is~~ as stretch.

4. Effects of a force;

- 1. A force can move a body originally at rest. Example: When a car, which is originally at rest is pushed, the car begins to move.
- 2. A force can stop a moving body. Example: A moving bicycle is stopped by applying the brakes.
- 3. A force can make a moving body to move faster. Example: The speed of a ~~high~~ bicycle increases, when more force is applied on the pedal by the cyclist.
- 4. A force can slow down a moving body. Example: The speed of a moving vehicle is slowed down by applying brakes.
- 5. A force can change the direction of motion of a moving body. Example: A player kicks a moving football to change its direction of motion.
- 6. A force can change the shape or size of a body. Example: on squeezing a piece ~~of~~ of rubber, its shape changes.