

Home work

29 - JULY - 2021

Exercise - B 1, 2, 3, 4

1. Define force.
2. Give an example of forces as push and pull.
3. Explain force as stretch with the help of an example.
4. Describe the different effects of force with appropriate examples.

Answer

Teacher's Signature

Ex-B.1 - Force is the term used for the push or pull.

- B.2** - (i) a push - to open a door, we push it.
 (ii) a pull - to move a grass roller on a lawn, it is pulled by a gardener.
 (iii) a stretch - stretching a rubber string.
 (iv) a squeeze - change in shape of a sponge on squeezing.

B.3 - Force is any physical cause that, when un-opposed, will change the state of motion of an object. The S.I. unit of force is called Newton.

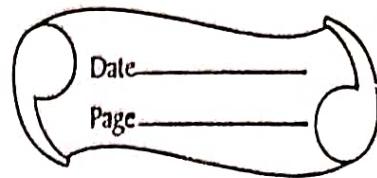
Q- When a force is applied on a stationary body, it begins to move.

Q.- Force is a push or pull. Force can also be defined as an external agent which can change the state of rest or motion of a body. A force has force has both magnitude and direction. The direction in which the force is applied is called the direction of the force.

Q.- An example of push as a force would be to push on a swing. Therefore moves the swing in a particular direction and the

harder that you push the further the swing will go.

- Example of pull. When we apply force and the door moves towards, the force applied is said to be a pull force.
- Drawing a bucket of water from a well.
- When a rubberband is stretched, a force is felt that tends to decline any sort of deformation. The force developed when the deformation of the rubberband takes place is the counter force acting against the externally applied force called the elastic force.
- Force has the following effects on objects:
 - A force can move a body originally at rest.
Ex- A car originally at rest when pushed, begins to move.
 - A force can stop a moving body.
Ex- A moving bicycle is stopped by applying the breaks.
 - A force can make a moving body to move faster.
Ex- A swing moves faster when a push is given in the direction of the moving swing.



A force can slow down a moving body:

Ex-The speed of a moving vehicles is slowed down by applying breaks.

A force can change the direction of motion of a moving body:

Ex-a player kicks a moving football to change its direction of motion, a player applies force with a Hockey stick to change the direction of motion of the ball.

A force can change the shape or size of a body:

Ex: On squeezing a piece of rubber its shape changes, on stretching a rubber string its length increase.