

1. What are the effects of force?

Ans- The effects of force are -

- (i) A force can move a body originally at rest.
- (ii) A force can stop a moving body.
- (iii) A force can make a moving body to move faster.
- (iv) A force can slow down a moving body.
- (v) A force can change the shape or size of a body.

2. Differentiate contact and non-contact force.

Ans-

Contact Force

Non Contact Force

i) The force which acts on bodies by making an actual contact is called contact forces.

i) The force which act on bodies with no contact with them are called non contact force or forces from distance.

ii) The frictional force is an ~~exa~~ example of a contact forces.

ii) Gravitational force is an example of a non contact force.

3. What do you mean by normal force?

Ans-

The normal force is the force that surfaces exert to prevent solids objects from passing through each other. Normal force is a contact force.

For example: The surface of a floor or table that prevents an object from falling.

4. Differentiate mass and weight.

Mass	Weight
i) The quantity of matter in a body is known as mass.	i) Weight is the Gravitational force with which the earth attracts towards its centre.
ii) Mass is a scalar quantity.	ii) Weight is a vector quantity
iii) The mass of a body is constant everywhere in the universe	iii) The weight of the body is variable. It depends on the location.
iv) The mass of a moving body is $m = F/a$.	iv) The weight of the body is given by $W = mg$.
v) The unit of mass is kg.	The unit of weight is N.

5. Define rolling friction with one example.

Ans- When an object rolls over a surface, the force which opposes the rolling motion of the object is called the rolling friction. It is less than the sliding friction on a body of same mass.

For example:- Ball bearings are used between the hubs and axles of a ceiling fan and a bicycle.