CLASS-VIII PHYSICS

PT-1 SUPPORT MATERIAL (2018-19)

CH-11 FORCE AND PRESSURE

1. A push or pull is called force. Unit of force is Newton.

2. There are two types of forces: i) Contact force ii) Non-contact force.

3. Contact Force:-Contact force is a force which acts only when the objects are in physical contact with each other.Ex-Muscular Force and Frictional Force.

4. Non-Contact Force:-The force which can act even without any actual contact between the two objects.Ex-Magnetic Force, Electrostatic force and Gravitational force.

5. A force arises due to the interaction between two objects.

6. Force has magnitude as well as direction.

7. Effects of force:-i) A force can make an object move from rest.

ii) A force can change the speed of an object if it is moving.

iii) A force can change the direction of motion of an object.

iv) A force can bring about a change in the shape and size of an object.

8.<u>PRESSURE:-</u>Force per unit area is called pressure.

Pressure =Force /Area

Unit of pressure is Pascal.

9. Liquids and gases exert pressure on the walls of their containers.

10. ATMOSPRERIC PRESSURE:- The pressure exerted by air around us is known as Atmospheric pressure.

CLASS-VIII PHYSICS PT-1 SUPPORT MATERIAL (2018-19) CH-12 FRICTION

1. Friction is a contact force which opposes the motion of the object.

2. Friction depends on the nature of the surfaces in contact.

3. There are three types of friction:

i) Static Friction

ii) Sliding Friction

iii) Rolling Friction

4. STATIC FRICTION: - Static friction comes into play when we try to move an object at rest.

5. SLIDING FRICTION:- Sliding friction comes into play when an object is sliding over another.

6. ROLLING FRICTION:-Rolling friction comes into play when one body rolls over the other.

7. Static Friction > Sliding Friction > Rolling Friction.

8. Spring Balance: - Spring Balance is a device used for measuring the force acting on an object.

9. Friction is caused by the irrularities on the two surfaces in contact.

10. Friction can never be entirely eliminated No surface is perfectly smooth. Some irregularities are always there.