

Class 8

Chap 1 :Measurement

1. What is measurement?
2. What is a physical quantity?
3. What is the unit?
4. What is a fundamental unit?
5. What is a derived unit?
6. What is SI unit?
7. Why is measurement necessary in our daily life?
8. Differentiate between the fundamental unit and derived unit.

Chap 2 : Simple Machine

1. How does a simple machine make the work easier and faster?
2. What is a machine?
3. Write the name of two types of simple machines.
4. How many types of simple machines are there? What are they?
5. What is the principle of simple machine?
6. A crow-bar 2 m long is pivoted about a point 5 cm from its top. What is the smallest force which must be applied at the other end to displace a load of 100 N?
7. A uniform seesaw, 5 m long, is supported at centre. A girl weighing 50 kg sits at a distance of 1 m from the centre of the seesaw. Find where a boy of weight 20 kg must sit on the other side of seesaw so as to balance the weight of the girl. To which class lever it belongs?

Chap 3 Pressure .

1. What is pressure? What is its SI unit?
2. What do you mean by atmospheric pressure?
3. Why does a sharp nail pierce a wooden block easily whereas a blunt one does not when they are struck with the same force?
4. Differentiate between air pressure and atmospheric pressure.
5. Differentiate between force and pressure
6. Give a reason why a girl wearing pointed heeled shoes exerts more pressure on the ground than the pressure exerted by the elephant?
7. Why is the foundation of buildings made wider than walls?
8. Truck and buses have back wheels in pairs. Why?
9. The pressure exerted by a force acting normally a surface having area 0.1m^2 is 1000 N/m^2 . Find the force applied.
10. The pressure exerted by a liquid column of depth 0.5 m on the base of its container is 5000 N/m^2 . Find the density of the liquid (take $g = 10\text{m/s}^2$).
11. A force of 40 N acting normally on a surface exerts a pressure of 800 N/m^2 . Find the area of the surface.
12. A man weighing 60 kg is standing on his feet covering a total area of 120 cm^2 . What is his pressure on the floor? If he sits down to cover a total area of 15000 cm^2 , what is his pressure now?
13. Write in short about a mercury barometer.
14. Prove that $P = dgh$.