

Name: \_\_\_\_\_ Date: \_\_\_\_\_

Force and Pressure

Q1. What do you understand by state of Motion?

Ans. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Q2. Why the tools meant for cutting and piercing always have sharp edges?

Ans. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Q3. Explain why, the tip of a sewing needle is sharp.

Ans. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Q4. "When a ball is dropped from a height, its speed increases gradually."  
Name the force which causes this change in speed.

Ans. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Q5. Explain why, porters place a thick, round piece of cloth on their heads  
when they have to carry heavy loads.

Ans. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## Force and Pressure

Q1. What do you understand by state of Motion?

Ans. The state of motion of an object is described by its speed and the direction of motion. The state of rest is considered to be the state of zero speed. An object may be at rest or in motion; both are its states of motion.

Q2. Why the tools meant for cutting and piercing always have sharp edges?

Ans. The cutting edges of tools like blades, knives etc., are provided with sharp edges to cut the things easily because the smaller the area, larger the pressure on a surface for the same force.

Q3. Explain why, the tip of a sewing needle is sharp.

Ans. The tip of the sewing needle is sharp so that due to its sharp tip, the needle may put the force on a very small area of the cloth, producing a large pressure sufficient to pierce the cloth being stitched.

Q4. "When a ball is dropped from a height, its speed increases gradually." Name the force which causes this change in speed.

Ans. The force of gravity causes all the objects to fall towards the earth. Thus, when a ball is dropped from a height, its speed increases gradually because of the force of gravity acting on it.

Q5. Explain why, porters place a thick, round piece of cloth on their heads when they have to carry heavy loads.

Ans. By this they increase the area of contact of the load with their head. So, the pressure on their head is reduced and they find it easier to carry the load.