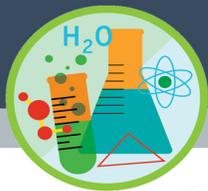




Grade 9



SCIENCE



Unit 5—Pressure Exerted by Solid (Answers)

1. The surface area of the pointed part of the nail is lesser. Therefore, the pressure created on pointed part of the nail is higher and it will move in quickly.

2. In slow motion – the amount of nail sinking/ moving in is lesser

In speedily – the amount of nail sinking/moving in is higher

3. Then, the pressure applied on the object to be cut is higher

4. When beat it speedily, the force applied on it is higher and the pressure created on the pointed part is higher.

When beat it slowly, the force applied on it is lower and the pressure created on the pointed part is lower.

5. Nm^{-2}

6. Surface area

7. Surface area, perpendicular force

8. Pressure = Perpendicular force/ surface area

$$\text{Pressure} = \frac{\text{Perpendicular force}}{\text{Surface area on which the force is acting}}$$

$$\begin{aligned} \text{Pressure} &= \frac{\text{N}}{\text{m}^2} \\ &= \text{N m}^{-2} \text{ (Newton per square meter)} \end{aligned}$$

Exercise

1	II	5	50N
2	II	6	III
3	II	7	I
4	IV	8	IV