

The pilgrims who climb the holy mountain, *Sri Pada* cover their ears using caps.

1. Why do they cover their ears?

2. The barometer given by the diagram is carried to the top of the Sri Pada mountain. The height

of the mercury column was 56 cm at that elevation. Calculate the atmospheric pressure in that day at the peak.

(density of mercury = 13600 kgm^{-3} , the acceleration of gravity = 10 ms^{-2})



3. Complete the table given below.

| Instance | How the atmospheric pressure acts |
|---------------------------------------|-----------------------------------|
| (i) While drinking with a straw | |
| (ii) Siphoning water from a fish tank | |
| (iii) Acton of the rubber sucker | |

4. Do the activity given below and state the observation and conclusion.

Requirements : a basin of water, a rubber ball

Method : Release the rubber ball to the basin of water

Take the rubber ball deep in the water and release it.

Observation (i).....

Observation(ii).....

Conclusion

5. Propose an activity to show when an object is partially or completely submerged in a fluid, the upthrust acting on it is equal to the weight of the fluid displaced by the object.