

HW
4.12.2021

ODM Connect

1. Why is it difficult to hold a school bag having a strap having made of a thin and strong string?

→ It is difficult to hold a school bag having thin strap because the pressure is inversely is quite larger. This is because the pressure is inversely proportional to the area on which the force acts. The smaller is the ~~large~~ area, the larger will be the pressure on the surface. In the case of a thin case of a thin strap, the contact area is very small. Hence, the pressure exerted on the shoulder is very large.

2. What do you mean by buoyancy?

→ The tendency for an immersed body to be lifted up in a fluid, due to ~~an~~ action of gravity is called buoyancy.

3. Why does an object float or sink when placed on the surface of water?

→ If the density of an object is more than

the density of the liquid, then it sinks in the liquid. This is because the buoyant force acting on the object is less than the weight of the object. If the density of the object is less than or equal to the density of the liquid, then it floats on the surface of the liquid. This is because the buoyant force acting on the surface of the liquid. This is because the buoyant force acting on the object is equal to the weight of the object.

4. You find your mass to be 42 kg on a weighing machine. Is your mass more or less than 42 kg?

→ When you weigh your body, an upward buoyant force acts on your body due to the air (a fluid) present around you. As a result, the body gets pushed slightly less than the actual value.

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