

HARDWORDS :

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|----------------|---------------|
| (1) Curved | (7) Displaced |
| (2) Denser | (8) Heavier |
| (3) Overloaded | (9) Immersed |
| (4) Floating | (10) Sinking |
| (5) Volume | (11) Density |
| (6) Balance | |

Q1 Explain why boats float higher in sea water than in river water?

Q1 Floating of an object in a liquid depends on its density. As the sea water contains salt that makes it more denser. River water contains very less salt so it is less denser than sea water. Hence boats float higher in sea water than on river water.

Q2 What Instrument would you use to find

(a) The volume of water that a kettle holds

(b) The weight of an object?

Ans 2

(a) Measuring Cylinder

(b) Weighing Balance

Q3 Two ^{Kilograms of} cotton and two kilograms of potatoes are lying in front of you?

(a) Do they have same volume?

(b) Do they have same Density?

(c) Do they have same weight?

Ans 3

(a) No, the volume of cotton will be more than two kilogram of potatoes as the space occupied by cotton is more than potatoes.

(b) No, the particles of potato are compactly arranged whereas particles of cotton are loosely arranged. So, potato occupies less space and have more density than cotton.

(c) Yes, Weight of potatoes and cotton will be same as they both have same masses i.e. 2 Kg's.

Q4 Explain why a screw sinks in water whereas a cork floats?

Ans 4 If the density of an object is greater than the density of water, it will sink. If the density of the object is less than that of water, it will float. Hence screw sinks and cork floats because density of screw is more than water and density of cork is less than water.

Dependence :

- (1) Volume : The space taken up by an object is called its volume
- (2) Density : The density of an object can be found out by dividing its mass by volume.
- (3) Weight : The force with which an object is attracted by the earth is called weight

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