

What is Buoyancy?

Quiz



- 1.) When an object sinks:
 - a. The weight of the object is greater than the upward buoyant force
 - b. The weight of the object is less than the upward buoyant force
 - c. The density of the object is less than 1 g/cm^3 .
 - d. The density of the object is equal to 1 g/cm^3 .
- 2.) Archimedes said that
 - a. the buoyant force is equal to gravity
 - b. The weight of the object is equal to the buoyant force
 - c. The weight of the displaced liquid is equal to the buoyant force
 - d. The buoyant force is equal to the density of the object
- 3.) An object is neutrally buoyant when
 - a. It neither sinks nor floats
 - b. The weight of the object is equal to the upward buoyant force
 - c. The density of the object is equal to the liquid it is submerged in
 - d. All of the above
- 4.) Mass is
 - a. A measurement of matter
 - b. Weight
 - c. Gravity
 - d. None of the above
- 5.) Weight is
 - a. Mass
 - b. $\text{Mass} \times \text{gravity}$
 - c. Gravity
 - d. A measurement of matter
- 6.) Density is
 - a. A material's mass per unit volume
 - b. A material's volume per unit mass
 - c. A material's thickness
 - d. A material's ability to float
- 7.) If the object's weight is greater than the upward buoyant force
 - a. The object will sink
 - b. Additional buoyant force is needed to be neutrally buoyant
 - c. Additional weight is needed to be neutrally buoyant
 - d. A and B are correct
- 8.) If the object's weight is equal to the buoyant force
 - a. The object will remain at rest
 - b. The object will neither sink nor float
 - c. The object is neutrally buoyant
 - d. All of the above

1.) a 2.) c 3.) d 4.) a 5.) b 6.) a 7.) d 8.) d