

Characteristic Properties-Density: Objectives and Vocabulary

By referring to the various handouts, notes, lab activities and homework covered during this unit, then at the end of this unit of study, each student should be able to:

1. Define what is meant by a characteristic property.
2. Distinguish between properties that describe an object, and properties that describe a substance.
3. Define density and understand how to use the density formula ($D = m \div v$) to solve for density, mass and volume.
4. Know the definitions and use of Base vs Derived units of measurement.
5. Use the definition of buoyancy to explain and predict how objects/substances will float in a liquid, including the relative position of the objects in a liquid
6. Explain how a hydrometer is used to determine a liquids density and the advantages and disadvantages of using a hydrometer
7. Understand and explain how temperature affects the density and buoyancy of things.
8. Predict the effect of dissolving a solid in water on the density of water.
9. Identify a substance based on some experimental information.

Vocabulary:

Characteristic property

Base unit

Object property

Derived unit

Substance property

Buoyancy

Density

Hydrometer