

Assessment

Pretest

Atoms

- _____ 1. The smallest part of an element that still has the properties of that element is a(n)
- a. particle.
 - b. matter.
 - c. atom.
 - d. molecule.
2. Which of the following represent elements and which represent compounds?
- _____ a. O₂
 - _____ b. Ar
 - _____ c. KCl
 - _____ d. H₂
 - _____ e. Al
 - _____ f. NH₃
3. Label each of the following as either a pure substance or a mixture.
- a. concrete
 - b. water
 - c. oxygen
 - d. air
- _____
4. Why do helium-filled balloons and hot-air balloons float in the air?
- _____
- _____
5. Calculate the density of a substance with a mass of 157 g and a volume of 412 cm³. Can this substance float on water?
- _____
- _____
- _____
- _____ 6. Which of the following statements about a helium atom in the sun and a helium atom on Earth is false?
- a. They are likely to have the same chemical properties.
 - b. They are likely to have similar physical properties.
 - c. One will be five times more massive.
 - d. Neither one will be very chemically reactive.