

## Assessment

**Quiz****Section: How Is Matter Classified?**

In the space provided, write the letter of the term or phrase that best answers the question.

- \_\_\_\_\_ 1. Which statement is *not* true?
- Some elements exist as molecules.
  - Some elements exist as atoms.
  - Molecules are composed only of a single type of atom.
  - All molecules of a given substance are the same.
- \_\_\_\_\_ 2. In the same physical state, different molecular forms of the same element are called
- isotopes.
  - allotropes.
  - compounds.
  - diatomic molecules.
- \_\_\_\_\_ 3. A chemical formula for a molecular compound represents the composition of
- a molecule.
  - an atom.
  - the ions that make up the compound.
  - the crystal lattice.
- \_\_\_\_\_ 4. Pure substances can be
- elements.
  - compounds.
  - mixtures.
  - Both (a) and (b)
- \_\_\_\_\_ 5. A sample contains several pure substances that are not chemically combined. The sample is a(n)
- element.
  - compound.
  - mixture.
  - Both (a) and (b)
- \_\_\_\_\_ 6. The alloy brass is an example of a(n)
- element.
  - compound.
  - heterogeneous mixture.
  - homogeneous mixture.

**Quiz continued**

---

- \_\_\_\_\_ 7. Which statement is true about apple juice and orange juice?
- Apple juice is a homogeneous mixture, and orange juice is a heterogeneous mixture.
  - Apple juice is a heterogeneous mixture, and orange juice is a homogeneous mixture.
  - Both juices are homogeneous mixtures.
  - Both juices are heterogeneous mixtures.
- \_\_\_\_\_ 8. Nitrogen and oxygen gases are in air. Nitrogen and oxygen also form nitrogen dioxide. Nitrogen and oxygen form
- a mixture in air and a compound in nitrogen dioxide.
  - a compound in air and a mixture in nitrogen dioxide.
  - a mixture in both air and nitrogen dioxide.
  - a compound in both air and nitrogen dioxide.
- \_\_\_\_\_ 9. Physical means can be used to separate
- elements.
  - pure substances.
  - mixtures.
  - compounds.
- \_\_\_\_\_ 10. When used to separate mixtures, which of the following procedures relies on differences in particle size?
- attraction to a magnet
  - distillation
  - evaporation
  - filtration