

ConceptTest Questions for Properties of Matter:

Designed to test concept of density, and the concept of an intensive property of matter.

Two pieces of wood, Sample A and Sample B, have the same general appearance. Sample A has a mass of 35 g and a volume of 50 mL. Sample B has a mass of 63 g and a volume of 90 mL. These two objects are:

1. made of different wood and demonstrate the extensive properties of mass and volume.
2. made of the same wood and demonstrate the intensive property of density.
3. made of different wood and demonstrate the intensive property of mass.
4. made of the same wood and demonstrate the extensive property of density.

Correct Answer: 2. made of the same wood and demonstrate the intensive property of density.

Comment to instructor: Try to lead students into seeking what property could be determined with the information given. Discuss how extensive properties, such as mass, depend on the quantity of matter whereas intensive properties, such as density, are quantity independent.
