

Content Practice B**LESSON 1****Classifying Matter****Classification**

Directions: Answer each question or respond to each statement in the space provided.

Question	Answer
1. What particles make up atoms?	Atoms are made up of protons, neutrons, and electrons.
2. Describe the electrical charges of the particles in atoms.	Protons have a positive charge, electrons have a negative charge, and neutrons have no charge.
3. What are the two main classifications of matter?	Matter can be classified as either a pure substance or a mixture.
4. How do the two main classifications of matter differ?	Pure substances have a fixed composition, while mixtures do not.
5. How are atoms related to elements?	Elements are groups of atoms that have similar properties.
6. How are elements related to compounds?	Compounds are formed by the combination of different elements.
7. What can you learn about a compound from its chemical formula?	The chemical formula shows the number and type of atoms in a molecule.
8. Compare a heterogeneous mixture and a homogeneous mixture.	A heterogeneous mixture has different parts throughout, while a homogeneous mixture has a uniform composition.
9. Compare a solvent and a solute.	A solute is the substance dissolved in a solvent, which is the substance doing the dissolving.

Key Concept Builder**LESSON 1****Classifying Matter****Key Concept:** How can you classify matter?**Directions:** Complete the chart with the correct terms or phrases on the lines provided.**Matter**

- anything that (1) _____
- most made of (2) _____
- two classifications of matter: (3) _____ and (4) _____

Substances

- Composition (5) _____
- two types of substances: (6) _____

Elements

- made of only one type of (8) _____
- organized on the (9) _____
- can be identified by its (10) _____

Compounds

- made of atoms of two or more different (11) _____ that are (12) _____
- can be identified by its chemical (13) _____

Mixtures

- Composition (14) _____
- two types of mixtures: (15) _____

Heterogeneous mixture

- two or more (17) _____

Homogeneous mixture

- two or more (18) _____

Answers for the Classifying Matter

(1) occupy space & have mass; (2) elements; (3) elements; (4) compounds

(5) constant; (6) elements & compounds; (7) elements; (8) elements

(9) periodic table; (10) properties; (11) different kinds; (12) joined together

(13) formula; (14) different; (15) homogeneous & heterogeneous

(16) mixed; (17) different kinds; (18) same kind