Module 1 Assignment

Matter and Change

PART I Write the correct term (or terms) in the space provided.

1. The two properties that all matter has in common are ________________.

2. In the periodic table, elements in the vertical columns together form a(n) ________________.

3. A mixture that has the same proportion of components throughout is considered to be ________________.

4. The substances that are formed by a chemical change are called the ________________.

5. ________________ are elements that are good conductors of electricity.

6. The state of matter in which a material has a definite volume and a definite shape is the ________________.

7. Elements are arranged in the periodic table according to their ________________.

8. The smallest unit of an element that has the properties of that element is a(n) ________________.

9. When atoms of two or more elements are chemically bonded, the substance formed is a(n) ________________.

10. If testing shows an element is a poor conductor of electricity, it is probably a(n) ________________.

11. A blend of two or more kinds of matter, each of which retains its own identity and properties, is a(n) ________________.

12. If a material is tested and every sample has exactly the same properties and the same composition, it is a(n) ________________.

13. ________________ research is carried out for the sake of increasing knowledge.

14. A(n) ________________ is an element that has some characteristics of metals and some characteristics of nonmetals.
Module 1 Assignment (Matter and Change), continued

PART II For each of the following chemical reactions, identify the reactants and the products.

16. carbon + oxygen $\rightarrow$ carbon dioxide
   reactant(s): _____________
   product(s): _____________

17. mercury(II) oxide $\rightarrow$ mercury + oxygen
   reactant(s): _____________
   product(s): _____________

PART III On the line to the left of each symbol, write the letter of the correct element name.

   ______ 18. W
   ______ 19. Cl
   ______ 20. Co
   ______ 21. Si
   ______ 22. Na
   ______ 23. Cu
   ______ 24. Fe
   ______ 25. Au
   ______ 26. Sn

   a. silicon
   b. sodium
   c. cobalt
   d. iron
   e. tin
   f. tungsten
   g. chlorine
   h. gold
   i. copper
   j. silver

PART V Classify each of the following as either a physical change or a chemical change.

27. ________________________ melting an ice cube
28. ________________________ burning a piece of paper
29. ________________________ slicing a loaf of bread
30. ________________________ sharpening a pencil
31. ________________________ decomposing mercury(II) oxide
32. ________________________ dissolving sugar in water