

Skills Worksheet

Directed Reading B**Section: Elements** (pp. 134–137)**ELEMENTS, THE SIMPLEST SUBSTANCES**

1. A pure substance that cannot be separated into simpler substances by physical or chemical means is called a(n) _____.
2. A substance in which all of the “building-block” particles are identical is called a(n) _____ substance.
3. The building-block particles for elements are called _____.

CLASSIFYING ELEMENTS

4. The amount of an element present does not affect the element's _____.
5. Why does a helium-filled balloon float up when it is released?

Look at each property listed below. If it is a characteristic property of elements, write *CP* in the space provided. If it is not a characteristic property, write *N*.

- _____ 6. size
- _____ 7. melting point
- _____ 8. density
- _____ 9. shape
- _____ 10. mass
- _____ 11. volume
- _____ 12. color
- _____ 13. hardness
- _____ 14. flammability
- _____ 15. weight
- _____ 16. reactivity with acid

Directed Reading B *continued*

GROUPING ELEMENTS

17. What are two common properties that most terriers share?

18. All elements can be classified as metals, metalloids, or

_____.

19. An element that is shiny and that conducts heat and electricity well is called

a(n) _____.

20. An element that conducts heat and electricity poorly is called

a(n) _____.

21. Elements that have properties of both metals and nonmetals

are called _____.

**Indicate whether the description applies to a metal, a nonmetal, or a metalloid.
Write the correct letter in the space provided. Letters can be used more than once.**

- | | |
|---|----------------------|
| _____ 22. are malleable | a. metalloids |
| _____ 23. are dull or shiny | b. nonmetals |
| _____ 24. are poor conductors | c. metals |
| _____ 25. tend to be brittle and unmalleable as solids | |
| _____ 26. are almost always shiny | |
| _____ 27. are also called semimetals | |
| _____ 28. are almost always dull | |
| _____ 29. are somewhat ductile | |
| _____ 30. include boron, silicon, antimony | |
| _____ 31. include lead, tin, copper | |
| _____ 32. include sulfur, iodine, neon | |