Name Key Date Class

TEACHING TRANSPARENCY WORKSHEET 18

The Periodic Table

Use with Chapter 6, Section 6.1

1. How many elements are listed in the periodic table? 117
2. What is the atomic number of selenium? 34
3. What is the symbol for palladium? Pd
4. What is the atomic mass of strontium? 87.62 amu
5. How are elements that are gases at room temperature designated in the periodic table?
   Their Boxes contain red Balloon, or Green Color
6. How many columns of elements does the periodic table contain? 18
7. What is another name for a column of elements?
   group or family
8. How many rows of elements does the periodic table contain? 7
9. What is another name for a row of elements? period
10. Which period contains the least number of elements? period 1
11. What element is found in period 4, group 7? manganese
12. How are metals designated in the periodic table?
    Their Boxes are tinted Blue
13. How are metalloids designated in the periodic table?
    Their Boxes are tinted Green
14. How are nonmetals designated in the periodic table?
    Their Boxes are tinted yellow
15. What is the name of the group 1 elements (excluding hydrogen)? Alkali metals
16. What is the name of the group 2 elements? Alkaline earth metals
17. What is the name of the group 17 elements? Halogens
18. What is the name of the group 18 elements? Noble gases
19. What can be said about the electron configurations of all the elements in a group?
    Their valence electron configurations are Identical

Name Key Date Class

MATH SKILLS TRANSPARENCY WORKSHEET 6

Using the Periodic Table

Use with Chapter 6, Section 6.2

1. Identify the number of valence electrons in each of the following elements.

a. Ne 8

b. K 1

c. B 3

d. Mg 2

e. O 6

f. Cl 7

g. P 5

h. Si 4

2. Identify the energy level of the valence electrons in each of the following elements.

a. Br 4th energy Level

b. N 2nd energy Level

c. Ra 7th energy Level

d. H 1st energy Level

e. Ar 3rd energy Level

f. I 5th energy Level

3. Use the periodic table to write the electron configurations (using noble gas notation) for each of the following elements.

a. Li [He] $2s^1$

b. F [He] $2s^2 2p^5$

c. As [Ar] $4s^2 3d^{10} 4p^3$

d. Sr [Kr] $5s^2$

e. Bi [Xe] $6s^2 4f^{14} 5d^{10} 6p^3$

4. Determine the group, period, and block of the elements having the following electron configurations.

	Group	Period	Block
a. $1s^2$	18	1	S
b. $[Ne]3s^2 3p^1$	13	3	P
c. $[Ar]4s^1$	1	4	S
d. $[Kr]5s^2 4d^1$	3	5	d
e. $[Xe]6s^2 4f^{14} 5d^{10} 6p^4$	16	6	P