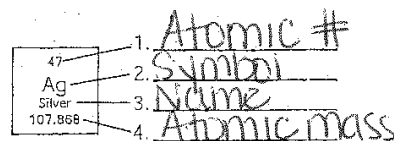


Organizing the Elements

◆ Understanding Main Ideas

The diagram at the right is a square from the periodic table. Label the four facts shown about each element.

Answer the following on a separate sheet of paper.



5. What does each of the facts shown above tell you about the element? *Properties*
6. In what order did Mendeleev arrange the elements in the periodic table? *increasing atomic mass*
7. What do elements in the same column in the periodic table have in common? *characteristics*
8. What happens to the number of valence electrons as you move from left to right in the periodic table? *increases*
9. What can you predict about an element from its position in the periodic table? *its properties*

◆ Building Vocabulary

From the list below, choose the term that best completes each sentence.

atomic mass unit (amu)	electron	family	group
neutron	nucleus	period	periodic table
proton	valence electron		

10. A(n) valence electron involved in the transfer or sharing of electrons.
11. A(n) proton is a positively charged particle in the nucleus.
12. An element's period is its row in the periodic table.
13. The central core of an atom is called the nucleus.
14. A(n) electron carries a negative electrical charge, and is located outside an atom's central core.
15. Mendeleev was the first to arrange elements according to their properties in a(n) periodic table.
16. Elements in a(n) group or family of the periodic table have similar characteristics.
17. A(n) neutron is a particle in the nucleus that has no charge.
18. Scientists use the amu to measure the mass of the particles within the atom.