

**REVIEW**

**Chapter 10**

**Atomic Structure and the Periodic Table**

**Part A. Vocabulary Review**

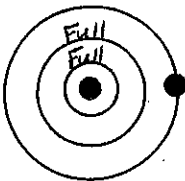
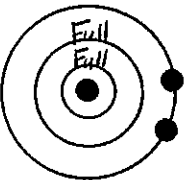
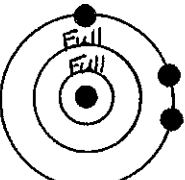
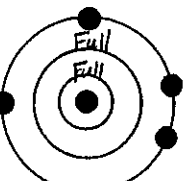
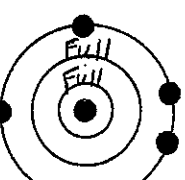
neutron	proton	✓chemical activity	periodic table
atom	isotopes	✓average atomic mass	electron cloud
metals	halogen	transition elements	atomic number
groups	metalloids	mass number	noble gas
electron	nucleus	nonmetals	periods

On the space at the left, write the term that correctly completes each statement. Use each term once.

1. \_\_\_\_\_ The group of elements with seven electrons in the outer energy level is the \_\_\_\_\_ family.
2. \_\_\_\_\_ The horizontal rows of elements are called \_\_\_\_\_.
3. average atomic mass An average of the masses of all the isotopes that occur in nature for an element is \_\_\_\_\_.
4. \_\_\_\_\_ A particle that has 1 u mass and no electric charge is a(n) \_\_\_\_\_.
5. \_\_\_\_\_ The smallest particle of any element is a(n) \_\_\_\_\_.
6. \_\_\_\_\_ Another name for families of elements is \_\_\_\_\_.
7. \_\_\_\_\_ Elements in the middle of the periodic table, periods 4 through 7, are called the \_\_\_\_\_.
8. \_\_\_\_\_ The number of protons in an atom is the \_\_\_\_\_.
9. \_\_\_\_\_ A particle that has a mass of 1 u and a charge of 1+ is a(n) \_\_\_\_\_.
10. chemical activity How easily an element reacts with other elements is a measure of its \_\_\_\_\_.
11. \_\_\_\_\_ The elements of Group 18 are called the \_\_\_\_\_ family.
12. \_\_\_\_\_ The center of an atom and the location of protons and neutrons is the \_\_\_\_\_.
13. \_\_\_\_\_ A total count of the neutrons and protons in an atom is the \_\_\_\_\_.
14. \_\_\_\_\_ Atoms of the same element but with different numbers of neutrons are \_\_\_\_\_.
15. \_\_\_\_\_ Elements that are found on the left side of the periodic table are \_\_\_\_\_.
16. \_\_\_\_\_ Elements that have some properties of both metals and nonmetals are \_\_\_\_\_.
17. \_\_\_\_\_ The particles that move about the nucleus and have a negative charge are \_\_\_\_\_.
18. \_\_\_\_\_ The elements that usually have five or more electrons in the outer energy level are \_\_\_\_\_ (on the right side of the periodic table)
19. \_\_\_\_\_ The region around the nucleus occupied by electrons is a(n) \_\_\_\_\_.
20. \_\_\_\_\_ A chart that shows the classification of elements is called the \_\_\_\_\_.

## Valence Clues

The diagrams below represent various atoms in which only the valence electrons are shown. Use the diagrams to provide the missing information.

	Element	Number of Valence Electrons	Metal, Nonmetal, Metalloid, Noble Gas	Group Number	Period Number
1.		_____	_____	_____	_____
2.		_____	_____	_____	_____
3.		_____	_____	_____	_____
4.		_____	_____	_____	_____
5.		_____	_____	_____	_____