STUDY

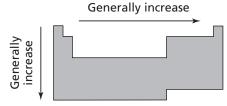
## Section 6.3 Periodic Trends

In your textbook, read about atomic radius and ionic radius.

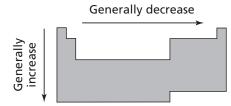
Circle the letter of the choice that best completes the statement or answers the question.

- 1. Atomic radii cannot be measured directly because the electron cloud surrounding the nucleus does not have a clearly defined
  - **a.** charge.
- **b.** mass.
- **c.** outer edge.
- **d.** probability.
- 2. Which diagram best represents the group and period trends in atomic radii in the periodic

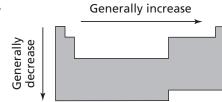




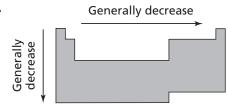
C.



b.



d.



- 3. The general trend in the radius of an atom moving down a group is partially accounted for by the
  - **a.** decrease in the mass of the nucleus.
- **c.** increase in the charge of the nucleus.
- **b.** fewer number of filled orbitals.
- **d.** shielding of the outer electrons by inner electrons.
- \_\_ is an atom, or bonded group of atoms, that has a positive or negative charge.
  - **a.** halogen
- **b.** ion

- **c.** isotope
- d. molecule

- **5.** An atom becomes negatively charged by
  - **a.** gaining an electron. **b.** gaining a proton.
- **c.** losing an electron.
- **d.** losing a neutron.
- **6.** Which diagram best represents the relationship between the diameter of a sodium atom and the diameter of a positive sodium ion?



Na

Na<sup>+</sup>



Na Na<sup>+</sup>



Na

