Section 2–1 The Nature of Matter (pages 35–39)

This section identifies the three particles that make up atoms. It also explains how atoms of the same element can have a different number of neutrons and describes the two main types of chemical bonds.

Atoms (page 35)

1. The basic unit of matter is called a(an) .

2. Describe the nucleus of an atom.

3. Complete the table about subatomic particles.

SUBATOMIC PARTICLES

Particle	Charge	Location in Atom
	Positive	
	Neutral	
	Negative	

4. Why are atoms neutral despite having charged particles?

Elements (page 36)

5. What is a chemical element?

6. What does an element's atomic number represent?

Chemical Compounds (page 37)

7. What is a chemical compound?

8. What are the elements in salt? How many of each element are there?

Chemical Bonds (pages 38–39)

9. What holds atoms in compounds together?

10. Complete the table about the main types of chemical bonds.

CHEMICAL BONDS

Chemical bonds

Type	Formed When…
Covalent bond	
Ionic bond	

11. What is an ion?

12. Is the following sentence **true or false**?
An atom that loses electrons has a negative charge.

13. The structure that results when atoms are joined together by covalent bonds is called a(an) .