

REVIEW and REINFORCEMENT
Predicting Types of Bonds**Section**
7-5**KEY CONCEPTS**

▲ The number of electrons an atom gains, loses, or shares when it forms chemical bonds is called its oxidation number.

▲ You can use the oxidation numbers of atoms to predict how atoms will combine and what the formula for the resulting compound will be.

■ Making Predictions: Understanding the Main Ideas

Predict how the following pairs of atoms will combine by writing the formulas for the resulting compounds. Oxidation numbers are given in parentheses.

1. Mg(+2) and Cl(-1)

2. Na(+1) and CO₃(-2)

3. Sn(+2) and F(-1)

4. Al(+3) and I(-1)

5. K(+1) and Br(-1)

6. Al(+3) and O(-2)

7. Cu(+2) and I(-1)

8. Sn(+4) and Cl(-1)

9. H(+1) and SO₄(-2)

ACTIVITY ■ Atoms and Bonding

Charting Oxidation Number

Complete the following chart. You may wish to use the periodic table on pages 154 and 155 of the textbook.

Element	Atomic Number	Number of Protons (+)	Number of Electrons (-)	Number of Valence Electrons	Type of Ion Formed	Oxidation Number
Hydrogen	1	1	1	1	+	1+
Helium						
Lithium						
Beryllium						
Boron						
Carbon						
Nitrogen						
Oxygen						
Fluorine						
Neon						
Sodium						
Magnesium						
Aluminum						
Silicon						
Phosphorus						
Sulfur						
Chlorine						
Argon						
Potassium						
Calcium						