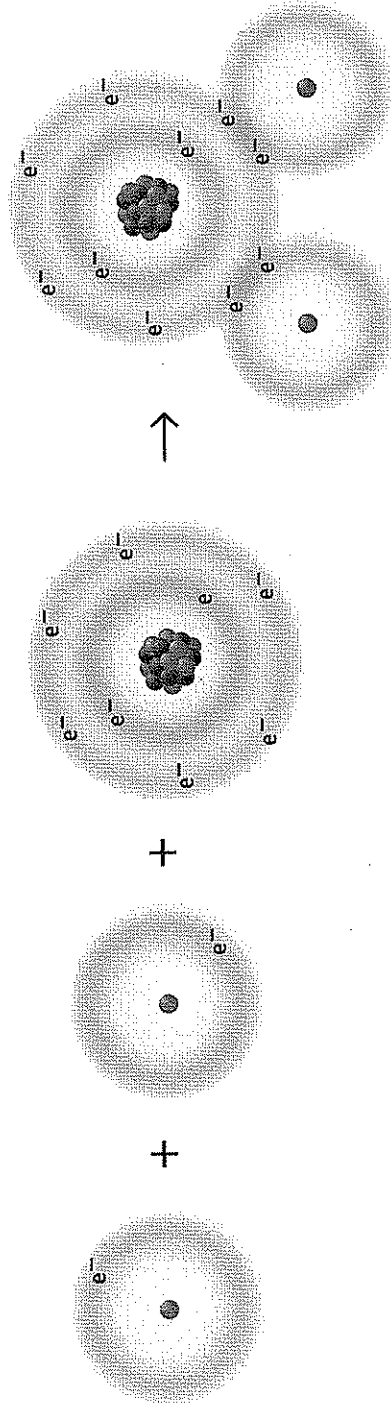


Covalent and Ionic Bonds



Covalent and Ionic Bonds

1. How many valence electrons are in a single hydrogen (H) atom and in a single oxygen (O) atom?

2. How many additional electrons does a hydrogen (H) atom need to complete its outermost energy levels? How many does an oxygen (O) atom need?

3. When two hydrogen atoms and one oxygen atom combine to form water, what type of bond forms between the atoms? How many electrons are involved in this bond?

4. What is formed when two or more atoms are held together by covalent bonds?

5. Why does a sodium atom tend to form a positive ion, whereas a chlorine atom tends to form a negative ion?

6. When a sodium atom and a chlorine atom combine to form sodium chloride, what type of bond forms between the atoms?

7. What is the net electrical charge on the compound sodium chloride (NaCl)?
