**Pg 83 #2-9 Solutions**

2. Covalent and ionic

3. In a covalent bond, atoms are connected by sharing a pair of electrons.

4. In an ionic compound, positive ions and negative ions are attracted to each other through their opposite electric charges.

5. When a sodium atom loses an electron, it becomes positively charged. When a chlorine atom gains an electron, it becomes negatively charged. All the negative charges repel each other but attract the positive charges. This results in an alternating arrangement inside a crystal lattice.

6. (a) Lithium forms a positive ion, whereas fluorine forms a negative ion.

(b) Li+ and F–

7. (a) Two

(b) One

8. (a) Carbonate, CO32–

(b) Phosphate, PO43–

(c) Ammonium, (NH4+) and nitrate, (NO3–)

9. (a) Covalent

(b) Four

(c) Polyatomic ion