Solutions

Each answer shows the steps, then the **result**.

2.1

- the electrostatic attraction between oppositely charged ions (cations and anions)

2.2

- Mg^{2+} and O^{2-}

3.1 B

- Ionic bonding is the electrostatic attraction between oppositely charged ions

3.2 B

- MgO has Mg^{2+} and O^{2-}

3.3

- each calcium atom loses 2 electrons to form Ca^{2+}; each of two fluorine atoms gains 1 electron to form F^{-}; the oppositely charged ions attract in a lattice

3.4

- MgO has ions with higher charges (2+/2− vs 1+/1−), so a stronger electrostatic attraction needing more energy to break