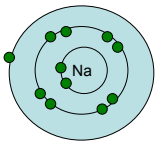
In Class Activity 1

- Draw the electron shells for the sodium atom around the chemical symbol for sodium



- What element has the electron structure that sodium would have if it lost one electron? **Ne**

In Class Activity 2

- How are electron shell diagrams different from electron dot structure diagrams?
  Shells show all electrons, dot structure only shows valence electrons
- Do they both tell you about the valence electrons?
  Yes
- Which is easier to draw?
  Electron dot structure diagram

In Class Activity 3

- Draw the electron dot structure for sodium and chlorine **atoms**
- What electron change do you imagine may occur so these elements bond?

Sodium transfer its valence electron to chlorine

In Class Activity 4

- Draw the electron dot structure for a magnesium atom in area to right →
- What is the charge of an ion that is formed from a magnesium atom? **2+**
- Why does it have this sign and amount of charge?
  Loses 2 electrons

In Class Activity 5

- Write the chemical formula for a compound made of magnesium ions, Mg^{2+}, and oxygen ions, O^{2-}
  MgO
- Write the chemical formula for a compound made of aluminum ions, Al^{3+}, and oxygen ions, O^{2-}
  Al_2O_3
- Write the chemical formula of the ionic compound calcium fluoride
  CaF_2

In Class Activity 6

- Rank these compounds in order from least polarity (1) to greatest polarity (4) by number below each compound

2	**1**	**4**	**3**
PF,	SF,	GaF,	GeF