

(L2) Valence and Core Electrons

TODAY'S
DATE

E.Q.: Why do elements in the same group in the periodic table have similar properties?

atoms in the same group (or column) have the same # of electrons in their outermost shell

BIG IDEA: the arrangement of elements in the periodic table reflects the arrangement of electrons in atoms of those elements (see "Table of Electron Shells" in our Investigate we just completed)

Valence shell - the outermost electron shell in an atom

Valence electron - the e^- located in the outermost electron shell of an atom, these electrons participate in chemical bonding

Core e^- - all electrons in an atom that are not valence electrons

elements with the same # of electrons in their outermost shell, or same # of valence electrons, have similar properties