

COMPARING SIZES OF ATOMS & IONS TRENDS IN THE P.T.

BC p.300
H Ch. 11
B 255

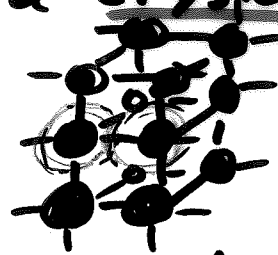
neutral

lost or
gained e^-

Terms:

Atomic Radii - the size of an atom
(A.R.) in a crystal lattice

(A.R.)



(one kind
of element)
(metals)

Calculated using x-ray diffraction

The bond length $\div 2 = A.R.$

(B.L.)



(metallic radii) p317

2) Covalent Radii - the size of an atom
(C.R.) when it is bonded to itself
in a diatomic* molecule. (non-metals)



$$\rightarrow C.R. = B.L. \div 2$$

(same as
above)

Ionic Radii - the size of an atom
when it has lost or gained electrons
(estimated) from its lattice.

- BC Ch. 11 p. 300 no questions
- Heath p321 # 1-4