

# Element Types (Review)

# [Noteset 1A, Part 2]

## Metals

Lose Electrons ( $e^-$ )

Form + Ion (Cation)

1 - 4 valence  $e^-$   
(outer)

groups 1 - 14

## Metalloids

Lose or Gain Electrons

Form + or - Ions

3 - 5 valence  $e^-$

Elements

B, C, Si, Ge, As,  
Sb, Te, Po, At

## Non-Metals

Gain Electrons ( $e^-$ )

Form - Ion (Anion)

4 - 8 valence  $e^-$   
(outer)

groups 14 - 18

## Metal Example

Na<sup>0</sup>

group 1, 1 val.  $e^-$

[Na<sup>••••</sup>]<sup>1+</sup>

lose 1  $e^-$ , +1 cation

## Metalloid Examples

C<sup>••••</sup>

4 val.  $e^-$ , gain/lose  $e^-$ ?

As<sup>••••</sup>

5 val.  $e^-$ , gain/lose  $e^-$ ?

## Non-Metal Example

Cl<sup>••••</sup>

group 17, 7 val.  $e^-$

[Cl<sup>••••</sup>]<sup>1-</sup>

gain 1  $e^-$ , -1 anion

## Periodic Table

groups  $\updownarrow$  1 - 18

periods  $\longleftrightarrow$  1 - 7

