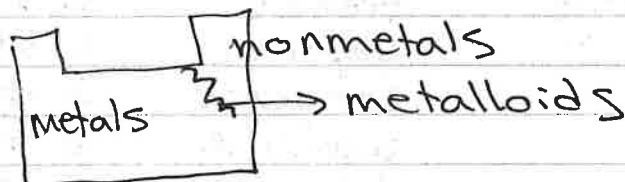
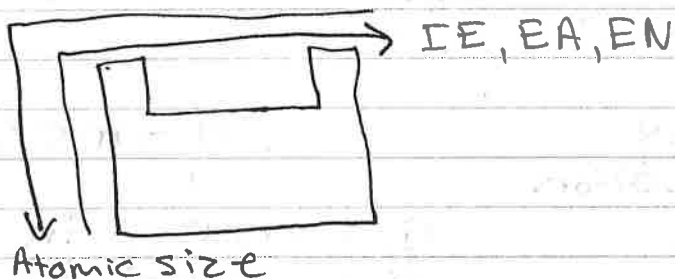


## EOC Concepts Unit 3

## 1. Periodic Table

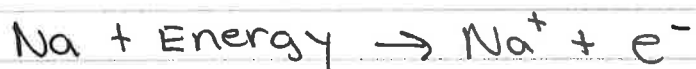


## 2. Periodic Trends



## 3. Ionization Energy

Energy required to remove one  $e^-$



Cation

## 4. Electron Affinity

Innate ability to attract  $e^-$



anion

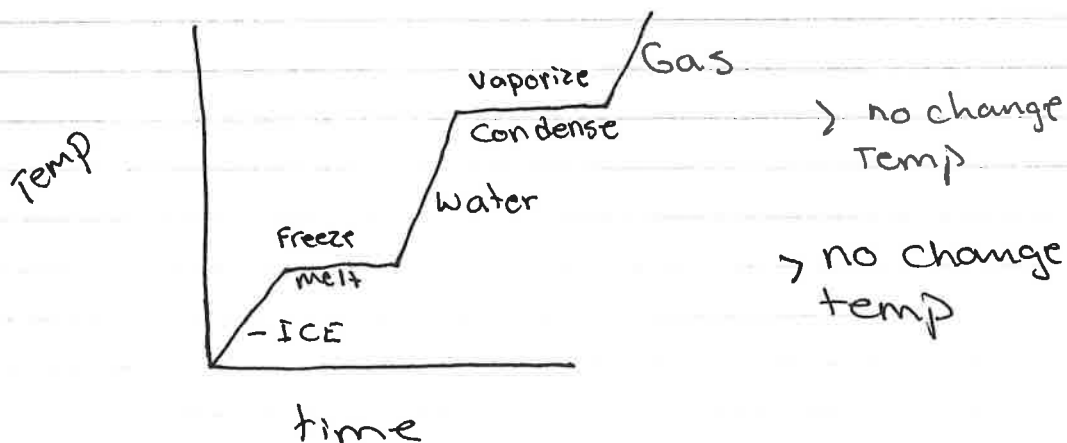
## 5. Metals

collectively have low IE/EA

## 6. Nonmetals

collectively have high IE/EA

## 7. Heating Curve



## 8. Phase Change

melt	S → L
freeze	L → S
vaporize	L → G
condense	G → L
sublime	S → G
deposition	G → S

## 9. Energy Calculation

$$q = mc\Delta t$$

q = energy in joules

m = mass in grams

c = specific heat J/g·°C

Δt = change in temp. °C