

How Elements form Ions

Ions - Atom that has gained or lost electrons, this means

it has net electron charge. Periodic = equal

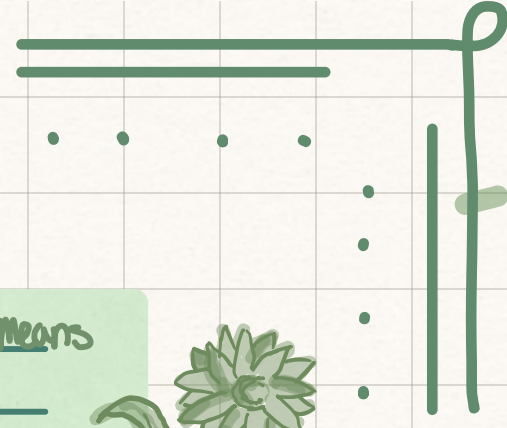
NA NE H

11p 10p it must lose one electron to look like neon

11-e 10-e

when it gains its neg/when it needs it pos

Mg¹² NE lose 2 z Al 3t NE z P-3 Ar S-2 Ar S-2
 12p 10p to LL Mg 13p 10p 15 18 16 18 16 18
 12-e 10-e 13-e 10p 15 -> 18 16 18 16 18



Name Ions

positive ions: Cations, you add ion to the end of the name (not connected!) Aluminium ions

Negative ions: you change the ending to (ide) ion (anions)

Picture



The Periodic Table of the Elements



summary

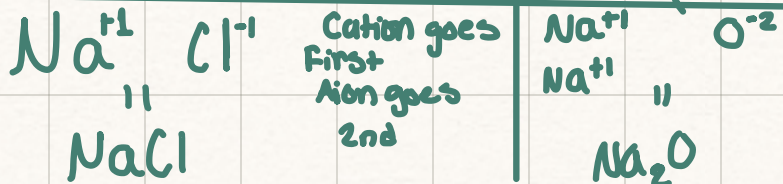
Ionic Bonds

attraction between oppositely charged ions.

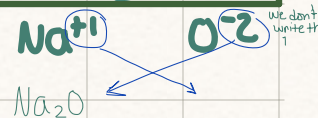
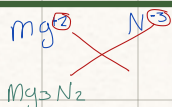
metals = pos

Atomic Compounds

- metal + nonMetal
- Crystalline solid
- high melting point
- Conduct electricity in water's when molten



if they cancel there is no number



we don't write the 1

Binary Ions Compounds



monatomic ions

one atom change

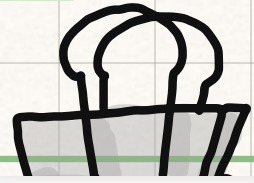
Polyatomic ions

OH⁻ ↑ if you have more anions you

NO₃ will put them in (,)

PO₄ - Phosphate 

Picture



	Cl ⁻¹ Chloride	F ⁻¹ Fluoride	P ⁻³ phosphide	S ⁻² Sulfide	O ⁻² oxide
K ⁺¹ Potassium ion	KCl	KF	K₃P	K₂S	H ₂ O
Mg ⁺² Magnesium ion	MgCl ₂	MgF ₂	Mg₃P₂	MgS	MgO
Sr ⁺² Strontium ion	SrCl ₂	SrF ₂	Sr ₃ P ₂	SrS	SrO
Al ⁺³ Aluminum ion	AlCl ₃	AlF ₃	AlP	Al ₂ S ₃	Al ₂ O ₃



Ternary Ions Compound

(3+ Clats)

Al³⁺ / NO₃⁻
Al(NO₃)₃

summary

Na⁺ OH⁻
NaOH bleach

Na⁺ OH⁻
NaOH

Mg(OH)₂