

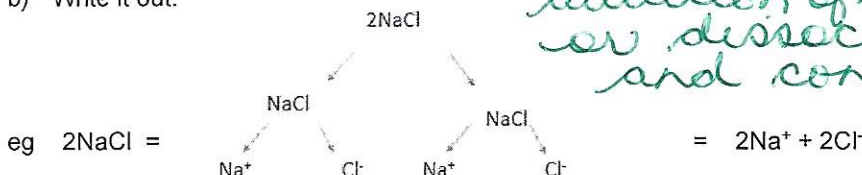
Compounds as ions

Education in Chemistry
 March 2020
[rsc.li/33qaoHE](https://www.rsc.li/33qaoHE)

Practice Writing
 Electrolytic Dissociation
 Equations

Split each compound into its ions:

- a) Draw a graphical representation.
- b) Write it out.



Electrolytes can, upon the addition of water, ionize or dissociate into ions and conduct electricity.

ABS
 Acids H-NM
 Bases M-OH
 Salts M-NM

Section 1:

- NaCl
- NaF
- LiF
- KBr
- CaO
- BaO
- BaS
- KI
- AlN
- GaP

Section 2:

- 2NaBr
- 3KI
- 4MgO
- InN
- 5SrS

Section 3:

- CaCl₂
- AlCl₃
- Na₂O
- CaO
- Al₂O₃
- Li₂S
- 2Li₂S
- 3Li₂S
- 5MgCl₂
- 8Na₃N
- Potassium fluoride
- Potassium oxide
- Potassium nitride
- Calcium nitride

Section 4:

- NaOH
- Na₂SO₄
- Na₂CO₃
- 2Na₂CO₃
- 6Li₂CO₃
- LiOH
- Ca(OH)₂
- Al(OH)₃
- 4Al(OH)₃
- MgSO₄
- 2MgSO₄
- Al₂(SO₄)₃
- 3Al₂(SO₄)₃

Section 5:

- 2K₂SO₄
- CO₂
- 2CH₄
- 4Be(OH)₂
- Aluminium iodide
- Water
- Sodium sulfate

Section 6:

- Ga(OH)₃ (s)
- Ga(OH)₃ (l)
- Ga(OH)₃ (aq)
- Cl₂(aq)
- 3NaCl(s)
- 3NaCl(aq)
- A solution of potassium iodide
- Melted barium fluoride

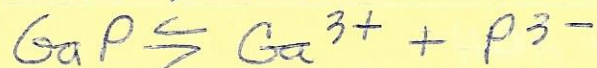
* super important

* even more super important re S, L, aqueous =

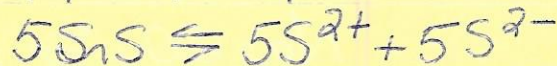
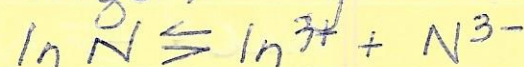
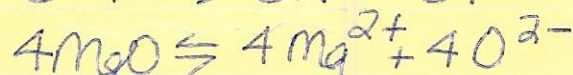
* Electrolytes are ABS that when dissolved in water dissociate or ionize to form ions. *

Compds as ions Answer Key

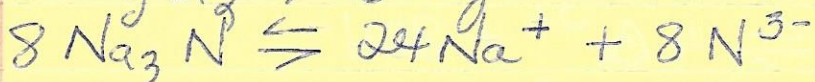
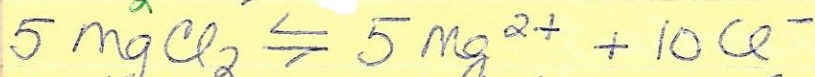
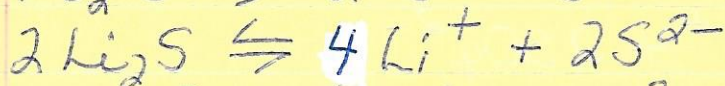
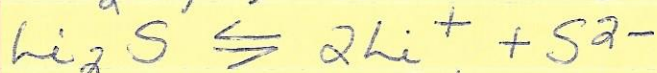
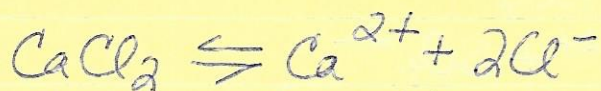
Section 1

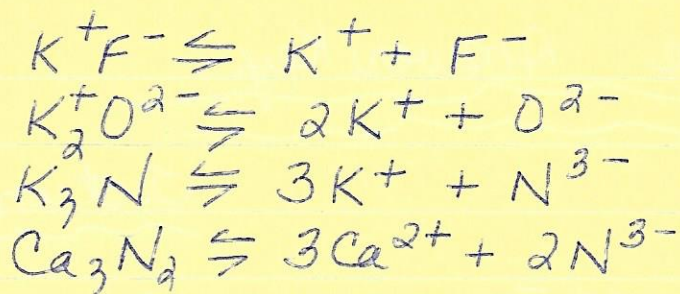


Section 2

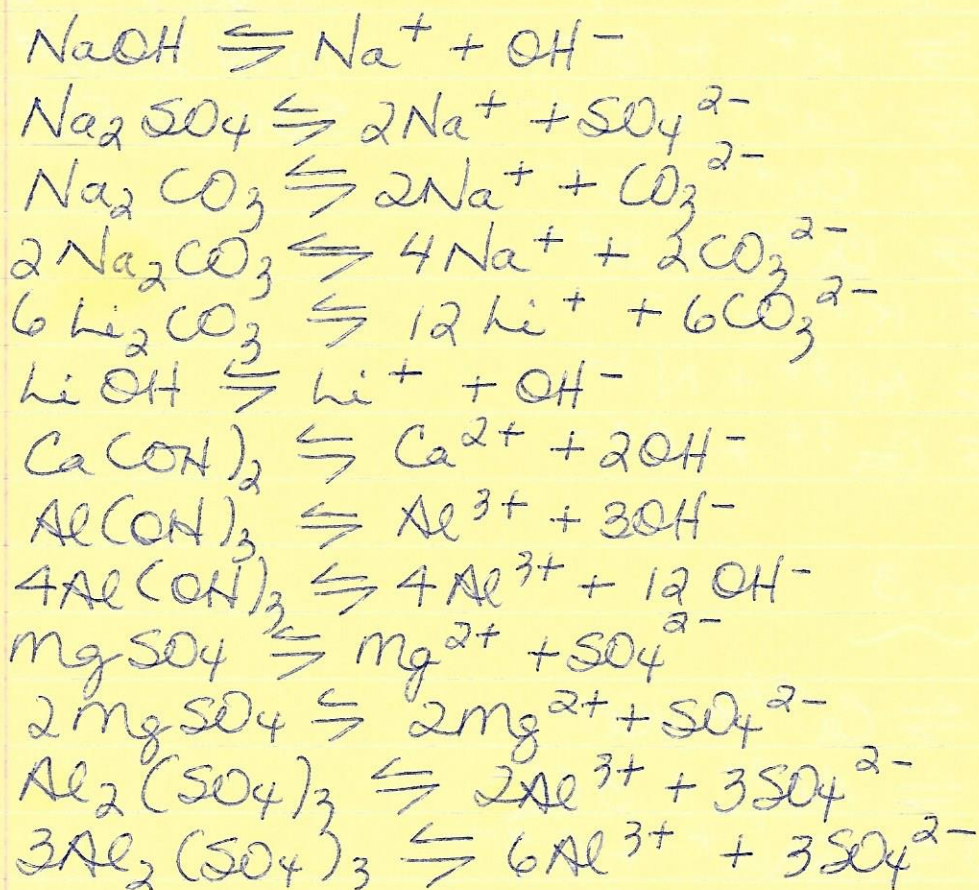


Section 3

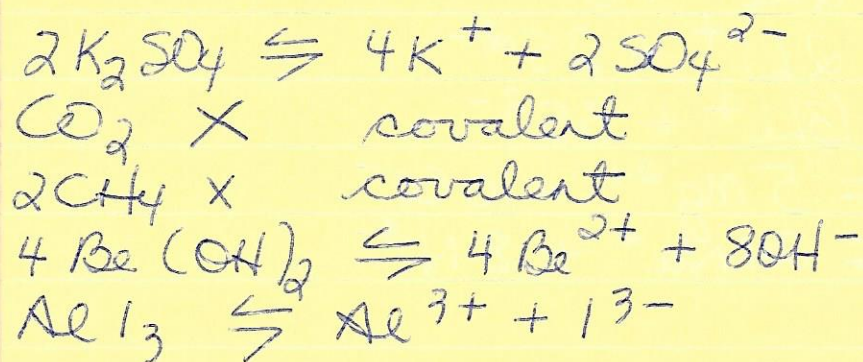




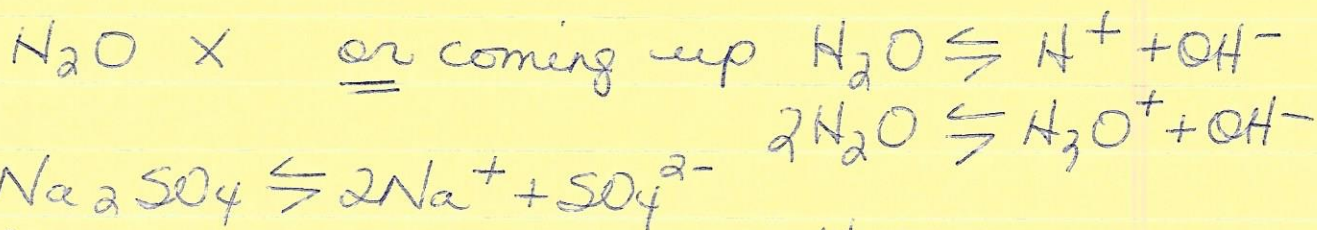
Section 4



Section 5



Section 5 cont.



OR NO ionization if NO WATER added !!

Section 6

we assume we are adding water



X $\text{Ga}(\text{OH})_3(\ell) \times$ no ionization unless water is present !!!

ABS in WATER! = electrolytes



$\text{Cl}_2(\text{aq}) \times$ covalent = even if water is present NO ionization occurs = the gas just dissolves

$3\text{NaCl}(\text{s}) \times$ unless water



$\text{BaF}_2(\ell) \times$ no water = no ionization