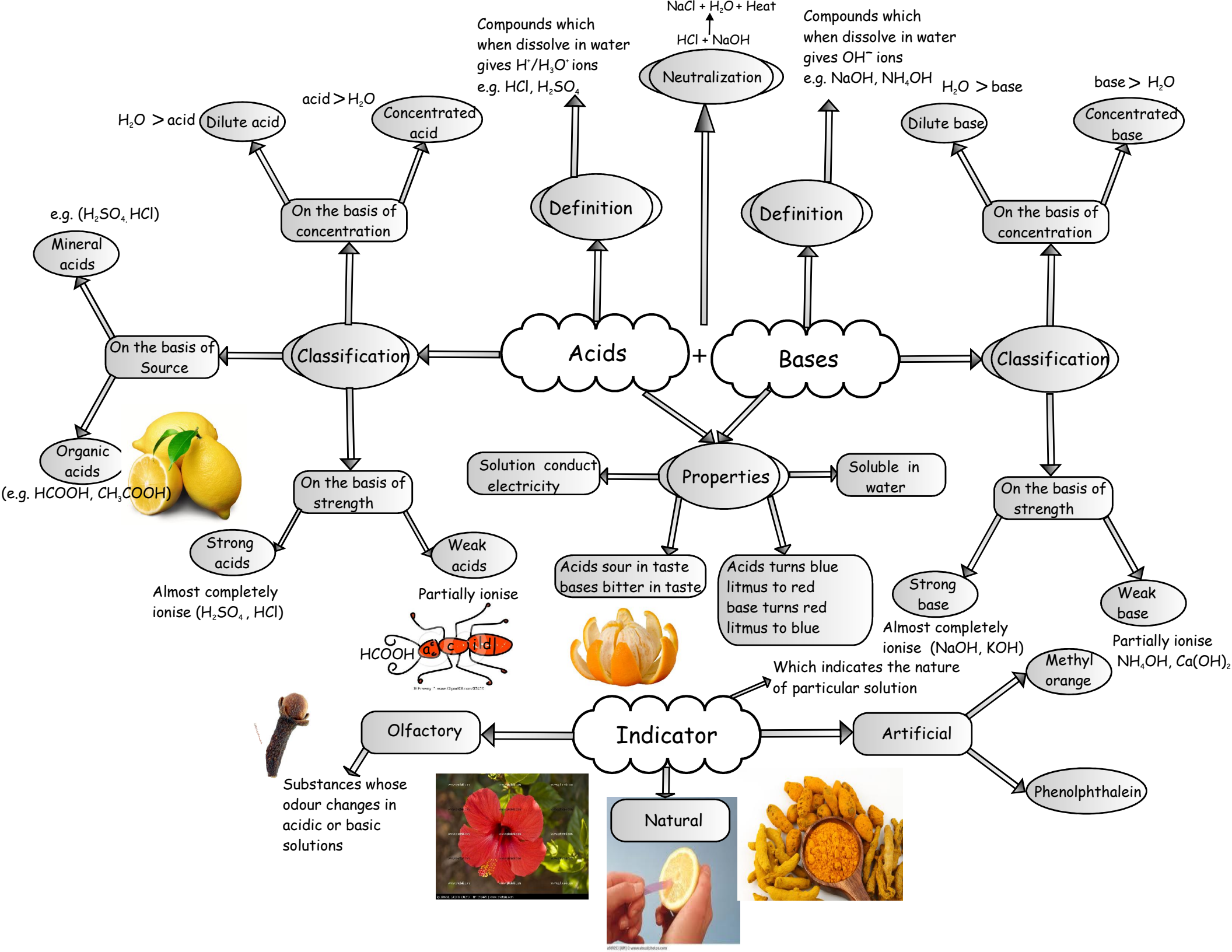
Acids
+
Bases
Definition
Compounds which when dissolve in water gives H^+/H_3O^+ ions e.g. HCl, H_2SO_4
Definition
Compounds which when dissolve in water gives OH^- ions e.g. NaOH, NH_4OH
Neutralization
$NaCl + H_2O$ + Heat
HCl + NaOH
Classification
On the basis of concentration
H_2O > acid
Dilute acid
acid > H_2O
Concentrated acid
On the basis of Source
e.g. (H_2SO_4, HCl)
Mineral acids
Organic acids
(e.g. HCOOH, CH_3COOH)
On the basis of strength
Strong acids
Almost completely ionise (H_2SO_4, HCl)
Weak acids
Partially ionise
Classification
On the basis of concentration
H_2O > base
Dilute base
base > H_2O
Concentrated base
On the basis of strength
Strong base
Almost completely ionise (NaOH, KOH)
Weak base
Partially ionise NH_4OH, $Ca(OH)_2$
Properties
Solution conduct electricity
Soluble in water
Acids sour in taste
bases bitter in taste
Acids turns blue litmus to red
base turns red litmus to blue
HCOOH
acid
Indicator
Which indicates the nature of particular solution
Olfactory
Substances whose odour changes in acidic or basic solutions
Natural
Artificial
Methyl orange
Phenolphthalein