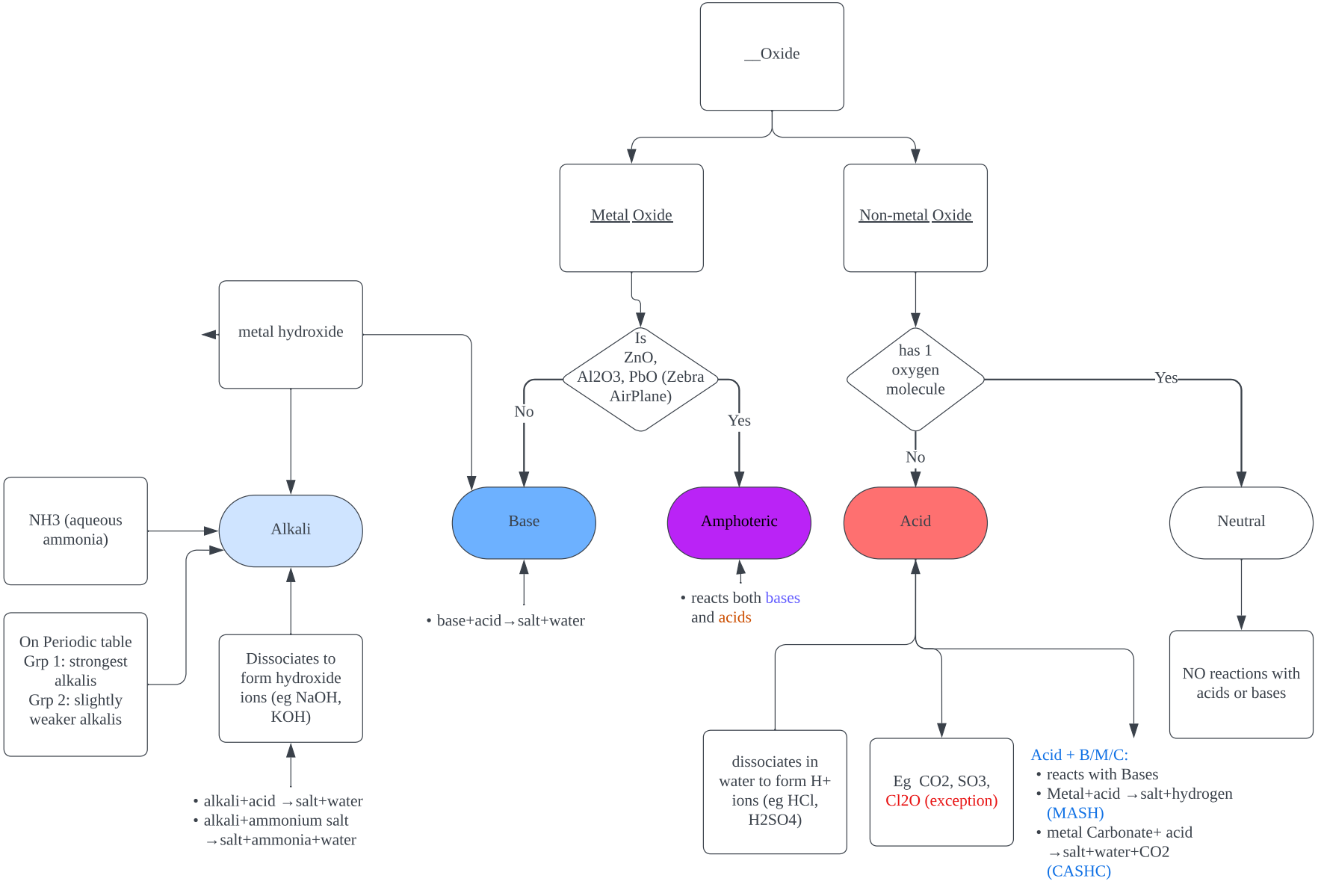
__Oxide
Metal Oxide
Non-metal Oxide
metal hydroxide
Is ZnO, Al2O3, PbO (Zebra AirPlane)
No
Yes
has 1 oxygen molecule
Yes
No
NH3 (aqueous ammonia)
Alkali
Base
Amphoteric
Acid
Neutral
On Periodic table Grp 1: strongest alkalis Grp 2: slightly weaker alkalis
Dissociates to form hydroxide ions (eg NaOH, KOH)
• alkali+acid → salt+water
• alkali+ammonium salt → salt+ammonia+water
• base+acid → salt+water
• reacts both bases and acids
NO reactions with acids or bases
dissociates in water to form H+ ions (eg HCl, H2SO4)
Eg CO2, SO3, Cl2O (exception)
Acid + B/M/C:
• reacts with Bases
• Metal+acid → salt+hydrogen (MASH)
• metal Carbonate+ acid → salt+water+CO2 (CASHC)