Genoup 2.

· Reactuity

- Therease dans the group. - great atomic radii

- greater stitelding

- decreasing attraction.

- easies to lose valence elections down the group.

. Renotion with oxygen

2Mg+ 02-> 2Mg0

· Reaction with chlorice.

Mg + OL2 -> Angale (More ingorous claws

the group)

· Reaction with water.

· My (5) + H2O (y) -> My O(5) + H2(g)

. My 2120 (1) -> My (cH)2 (4) Hz (9)

Drick Reaction with Water
MyD(s) + H200-) My (ct) 2 (1) pH=9

- Others give lower pH as they are not soluble.

Solubility — Hyd

- Hydroxides
Therease down the group
(Agout) is used to neutralise acted to storwed)

- Sufaite

decrease down the group (Banium meal to show soft tossus Tr x-rap)

Thornal Stability

- Nitration

more stable down the group. - larger ions, some charge

- less charge dusity - less planisity effect on mitrales

- less pilansing effect of - less prealitized out less weathered

- Courbonates
Some trend and some reasons

(Group 1 exc Li objest decompose)

20003 → 20002 +02 (Group 1 exc. Li) 2000(000)2 → 2000 +4002 +02 (Group 2)

MOD3 -> MO + CO2

Flame test - Method Platinion in Hel cone) Sample Above flame

- Explanation

- heart promotes electrons to a higher energy level

- Electron's are unstable at a higher level and chop back down.

- Energy is emmitted in the fam of withle light.

- Colour

Li: Scartet Red No: Yellow Ca: Brick Red K: Litai St. Red

Rb: Red Ba: Apple Green Cs: Blue

Group

Fz: pale yellow gas. OLZ: greenish gas. Brz: Red tiguid that gives off brown fumes

Iz: grey solid that sublines to purple gas.

Electronepativity Boiling Point decrease clown the group. Therease down the group - radius I due to shells!
- less attraction for nuclei - larger notecules, none - Langer LDF Same for reactivity - Greater energy, high bp Oxidising Agent (Halogen)

Ob > Br > 12 Reducing Agent (Holtde)

I > B+ >CV

Observations

Ageous Dragamic colourless Cla very pale green Brz yellow solution Yellow Iz brown solution purple

Test for habitles Reaction with Navy Reagent: AgNO3 with Nitric Acid · Cl2 + HO -> HCL + HLLO Ckall bacteria, treat obtaking water. Swimy pool) Agt + CC -> Agor (white ppt) · CL2 + 2NOWH -> NOW + NOWO + HW Agt + Br -> AgBr (CHEAIN ppt) (cold) (Bleach) · 3012 + 6NOWH -> 5NOW + NOWD3 + 3HOD Agt + IT -> AgI (pale yellow Art) (Hot) Reagast : Ammiria Reaction with onc. Intuine Acid ACR +2NHS -> [Agana)=]++ CI F & W NAF + HUSDY -> NOUTSDY + HF Ag Br + 2NHs -> CAG (NH), J+ + Br Noul + Hisa -> Nortsa + Ha Producing hydrogen hadrile Observations: white misty formes. Acid and Base Reaction. No rector. NACL + HOPPY -> NAHLPOY + HU Br : AlB: NuBr + HUSY -> NOHSD4 +HBr no rector, to other companiels. Redox: 24Br + HUSDy -> Brz + SOz +2420 Reaction with Mtz Dissolve in water White misty fund (HBI) HOL+ HOD -> OF + HOD HOL+ NHS -> NHUCL Red fines (Brv). Actilité, colourless gris (SD) I: ARB: NAI+HOO, -> NAHOO, + HI Reclox: 2HI + HISQ -> I2 + SQ + 2HID 641 + HUSO4 -> 312 + 5 + 4410 8HI + HUSCY -> 471+ HIS+4HID White misty fines (HL) Black residue and purple vapour (11) Gas with a bad egg smeil (Hrs)

(White strake)