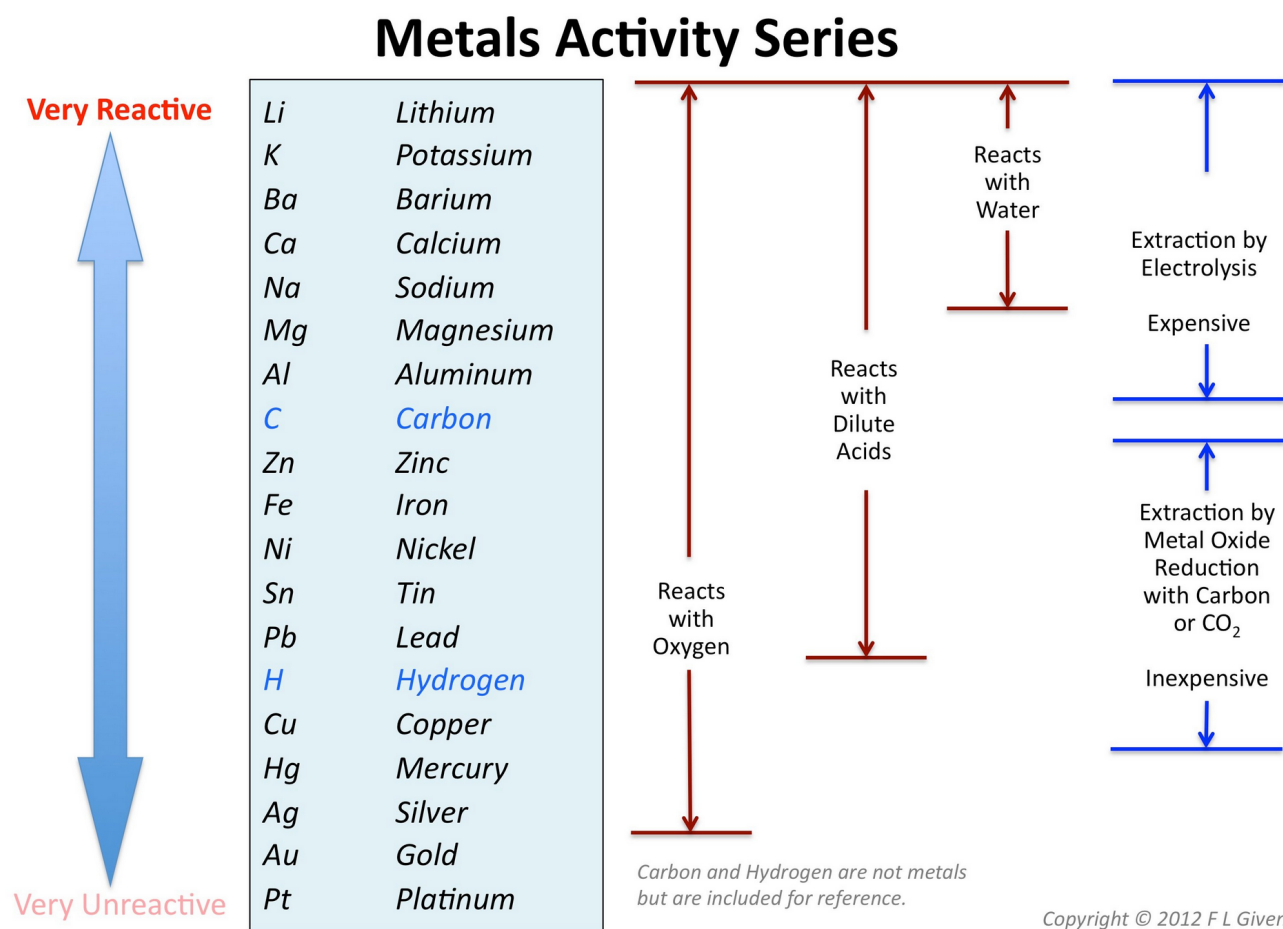


5. Reactivity series

2.15

Metals can be arranged in a reactivity series based on their reaction with:

- water
- dilute hydrochloric or sulfuric acid



2.16


Metals can be arranged in a reactivity series based on their displacement reactions between:

- metals and metal oxides
- metals and aqueous solutions of metal salts

2.17

Order of reactivity series

potassium	most reactive	K
sodium		Na
calcium		Ca
magnesium		Mg
aluminium		Al
carbon		C
zinc		Zn
iron		Fe
tin		Sn
lead		Pb
hydrogen		H
copper		Cu
silver		Ag
gold		Au
platinum	least reactive	Pt



2.18

Condition needed for iron to rust:

- Oxygen
- Water

2.19

Rusting of iron prevented by:

- barrier methods
- galvanizing
- sacrificial protection

2.20 OILRIG

Def:

- oxidation - receiving oxygen or loss of electron

- reduction - giving oxygen or gain of electron
- redox - reaction with oxidation and reduction involved
- Oxidizing agent - substance that oxidizes, receives electron
- reducing agent - substance that reduces, giving electron

2.21

Investigate reactions between dilute hydrochloric and sulfuric acids and metals