

Notes:- Ahmed Afzal (Dackify)

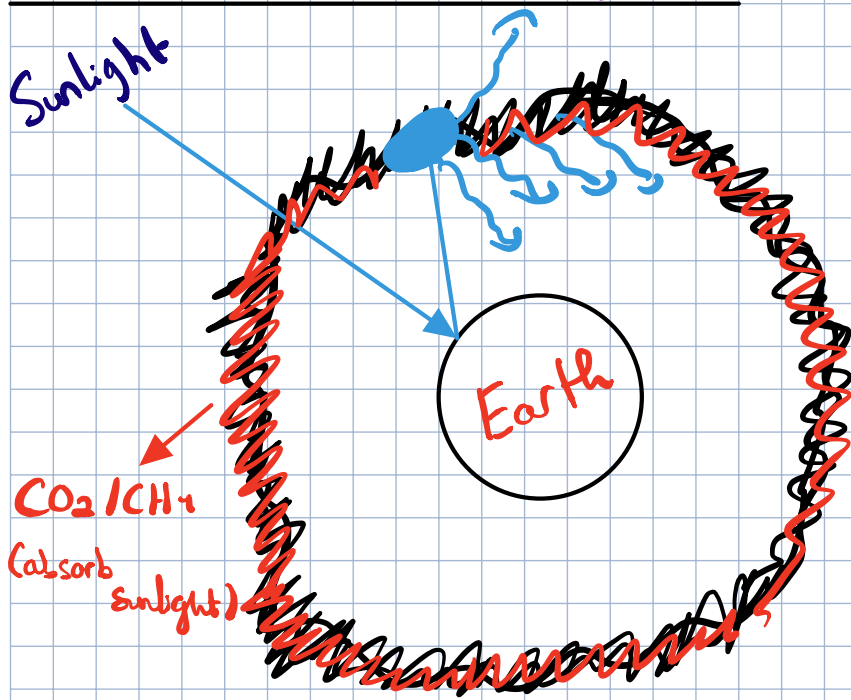
Credits:- SIR RDX (Rizwan Don ♡)

Pollutants:- Harmful substances for the environment!

The process in which Pollutants enter the environment is called :- **Pollution!**

Pollutants	Sources	Effects
CO_2	- Complete Combustion	Green house effect
CO	- Incomplete Combustion	Poisonous (Stops absorption of O_2 in blood)
$C_x H_y$	- Incomplete Combustion - Vegetative decay - Cow Dung	Green house effect
SO_2	- Volcanic eruption - Burning Fossil fuel in power station	Acid Rain
$N_x H_y$	- Sparks in car engine - Lightning in atmosphere	Acid Rain
O_3 ; Ozone	- Sparks in car engine - Lightning in atmosphere	Irritating to eyes & lungs
CFC's	- Old Refrigerator / AC - Aerosol spray	Depletion of Ozone
Pb	Burning Lead Compounds	Brain haemorrhage!

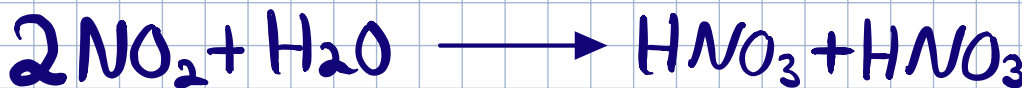
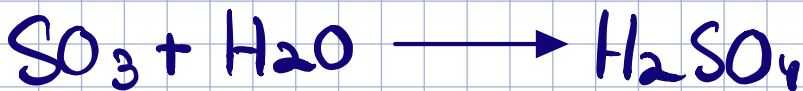
Greenhouse Effect :-



- ✓ Global Warming
- ✓ Extreme Climate Change
- ✓ Rise in sea level
- ✓ Floods
- ✓ Glacier Melt!

The process in which reflected radiations from Earth trapped by the gases like Carbon dioxide & Methane is called "Greenhouse effect"

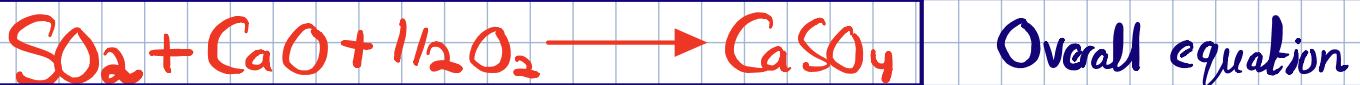
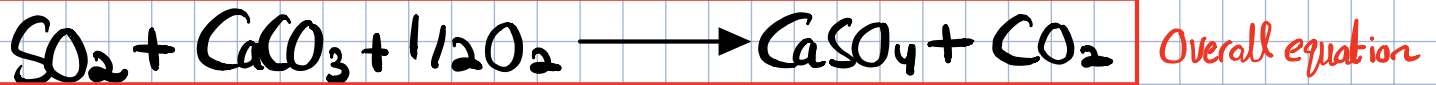
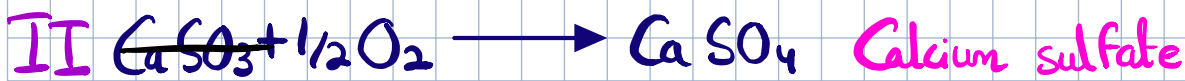
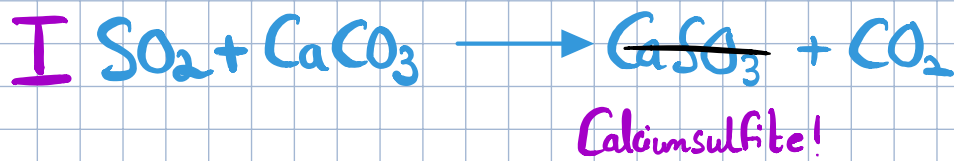
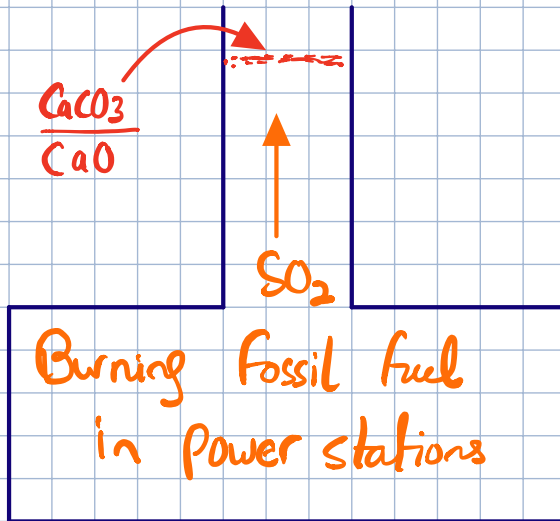
Acid rain :-



Acid Rain!

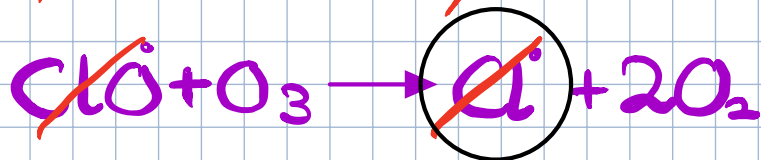
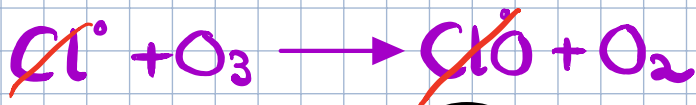
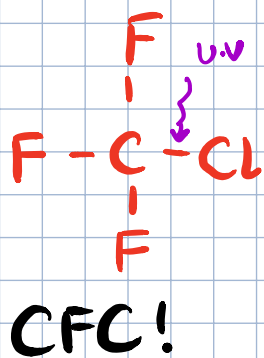
- Corrosion of limestone buildings
- Destroy Plants
- Harms Marine life!

Flue Gas desulfurization



The process in which SO_2 is removed from chimneys of Power stations with the help of CaO or CaCO_3 !

Depletion of Ozone!



Cl^\bullet
Catalyst!



U.V absorbed by $\text{O}_3 \rightarrow$ Skin Cancer!

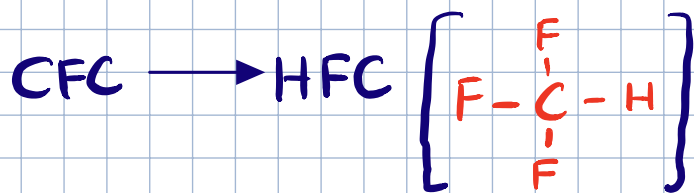


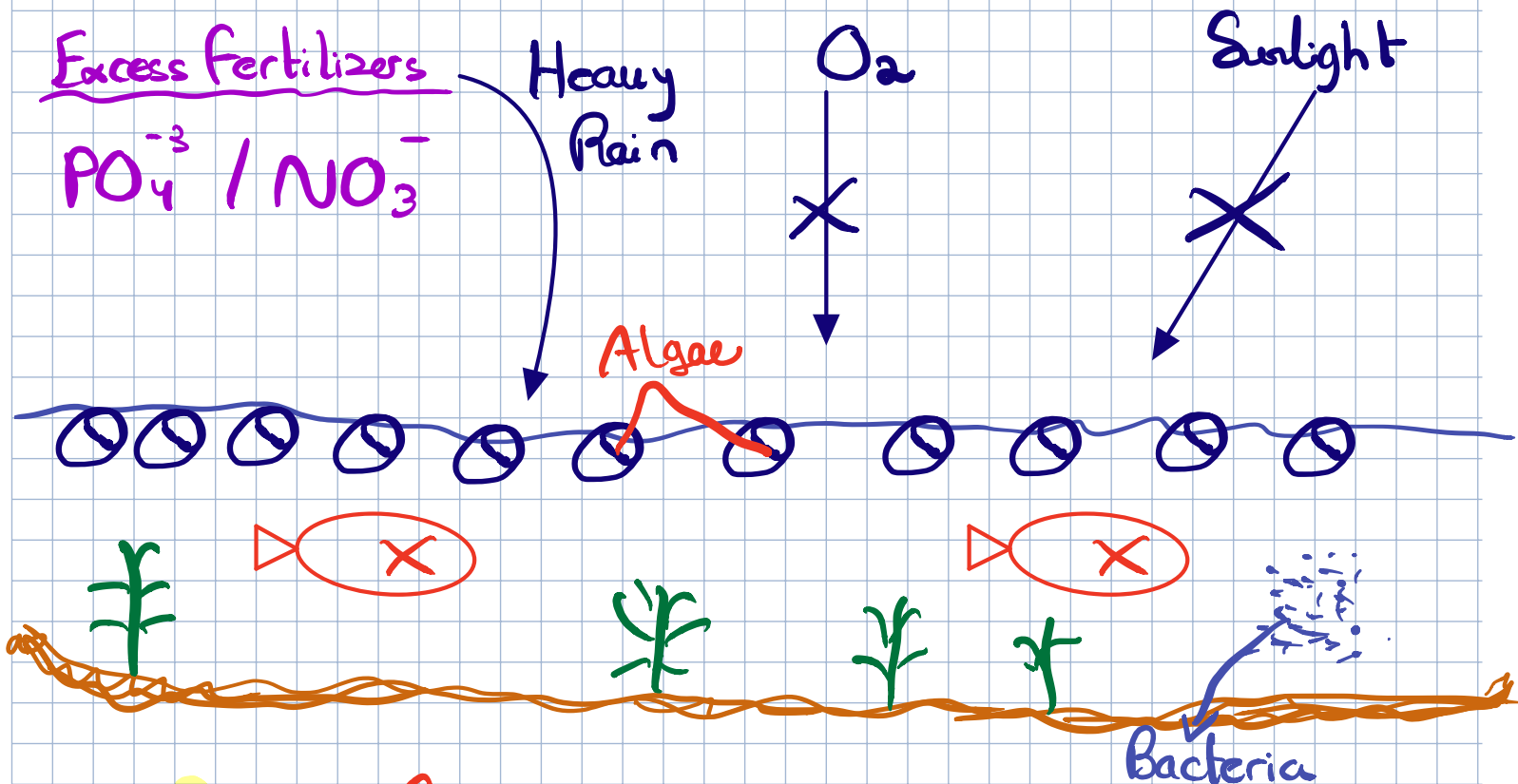
Photo Chemical Smog :-

Volatile + atmospheric + dust $\xrightarrow{\text{Sunlight}}$ Thick Brown HAZE
H.C Pollutants Particles (Photo chemical smog)

Causes lung diseases :- Bronchitis!

Volatile H.C combine with dust particles & atmospheric pollutants in the presence of sunlight to form a Thick Brown HAZE

≈ Eutrophication ≈



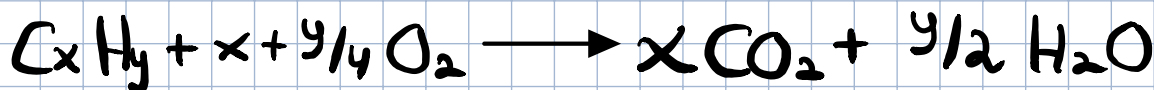
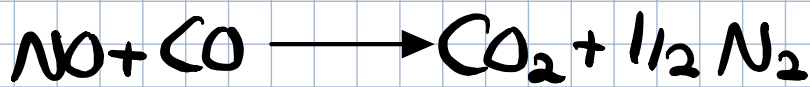
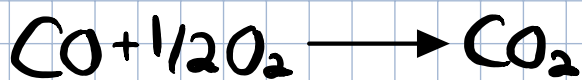
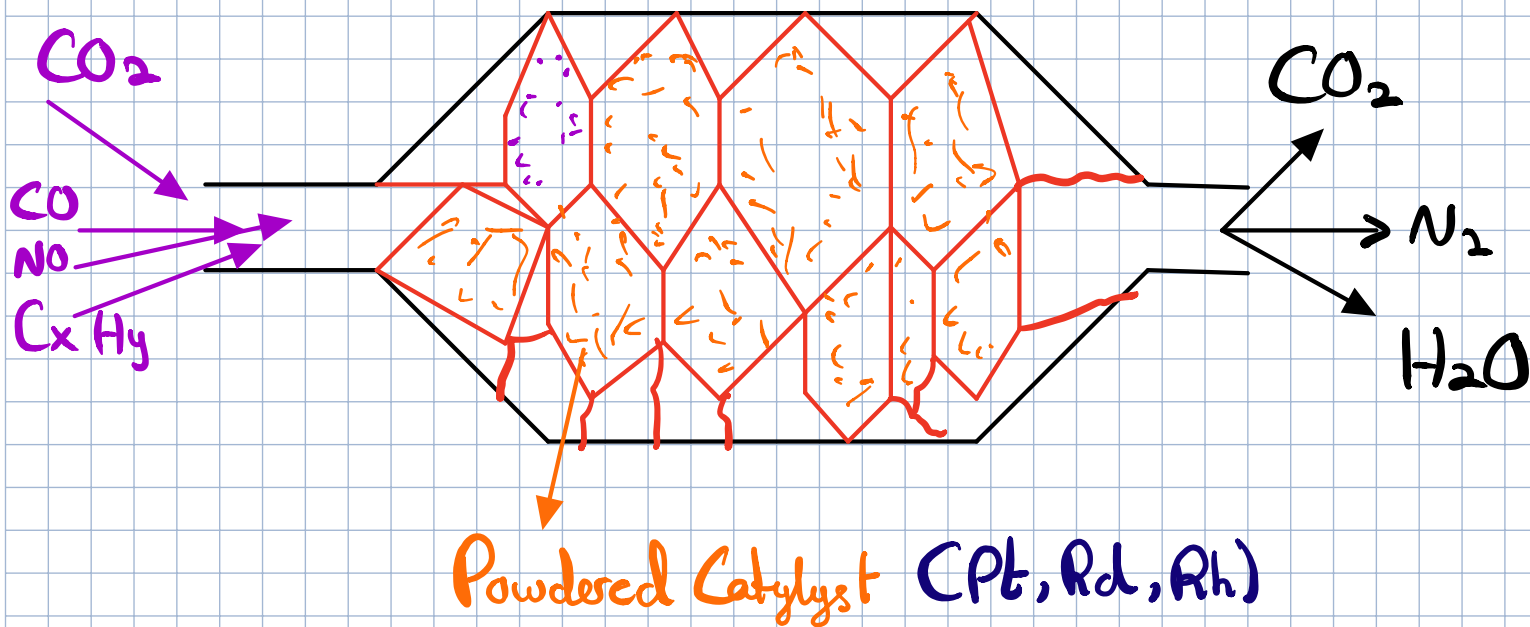
→ Excess Fertilizers drain out into river due to HEAVY Rain

→ Nitrates are consumed by Algae which causes their rapid growth, hence they cover the surface consequently Sunlight and Oxygen are blocked

→ Due to the absence of sunlight plants die while the dissolved oxygen is consumed by bacteria

→ FISH DIE! RIP!

≈ Catalytic Converter ≈



o) An instrument used to convert more harmful gases into less harmful gases!

o) Catalyst used in powdered form to increase the surface area, hence efficiency of the converter increases

o) CO_2 cannot be removed in Catalytic converter because it cannot be further oxidised

o) We have to replace catalyst on regular basis or after a period of time because of oxide layers around catalyst, it becomes poisonous

