

# Environmental Pollution : Part - I

## Land Pollution

- Deterioration of earth's land surface
- Caused due to garbage, factories, mining



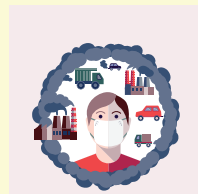
## Soil Pollution

- Contamination of soil and degrades the soil quality
- Occurs due to human activities
- Herbicides, pesticides are also responsible



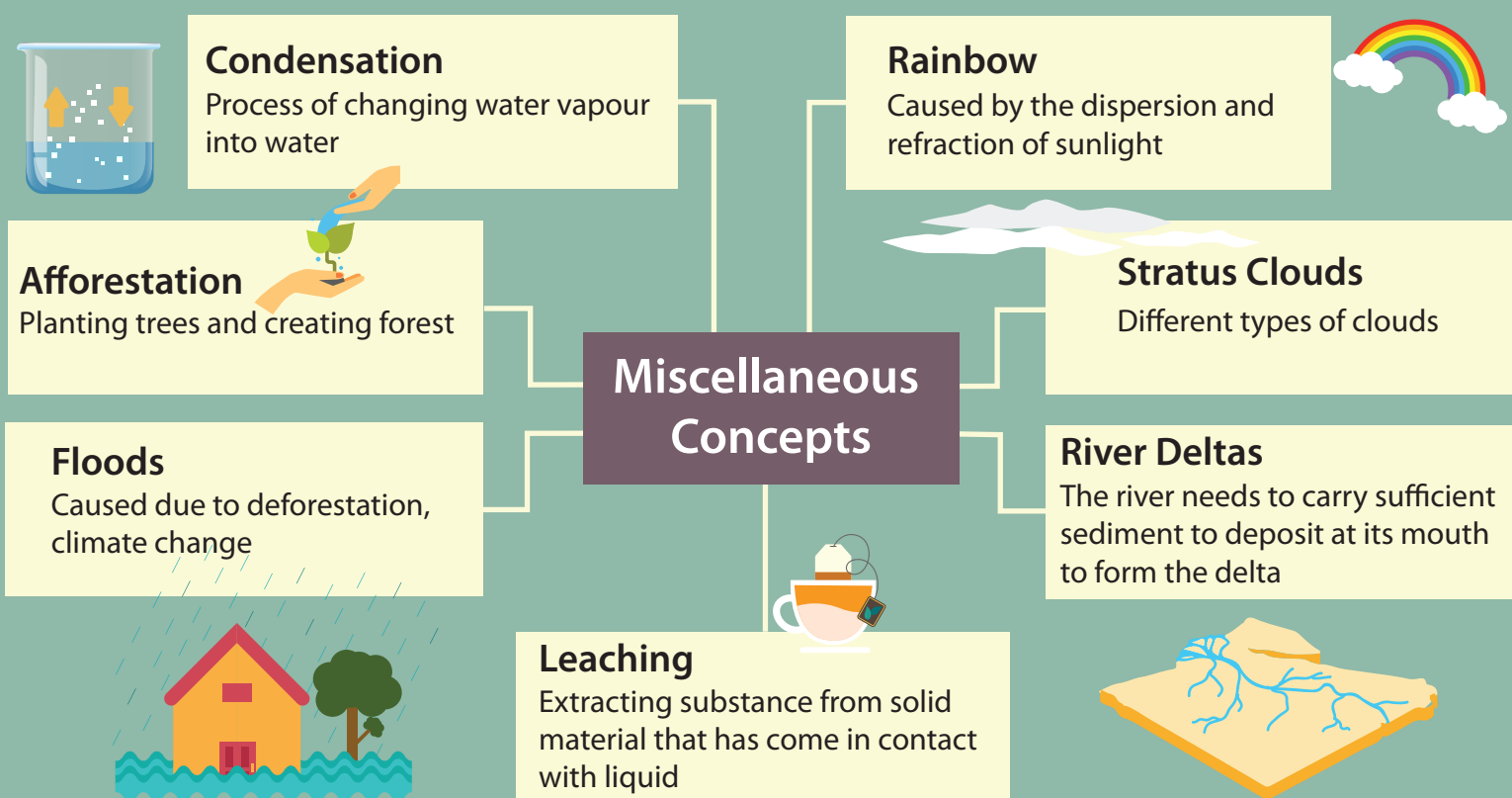
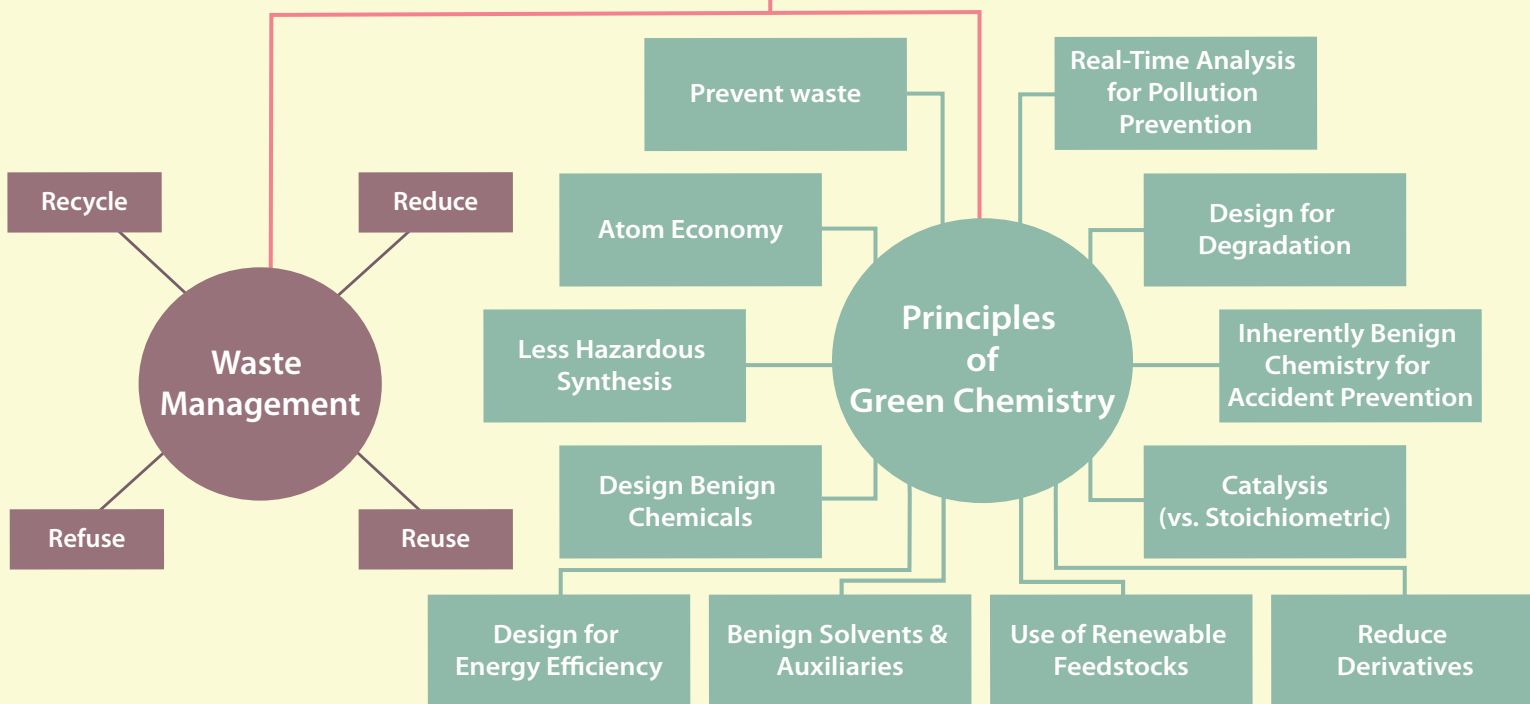
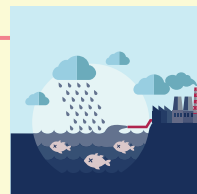
## Air Pollution

- Mixture of solid particles and gases in air is caused by gaseous pollutants and particulate pollutants



## Water Pollution

- Contamination of water by various organic waste, chemical pollutants



# Air Pollution

## Particulate Pollutants

Caused due to human activities

### Climate

- Climatic disturbance, like



Drought



Volcanic eruption

Reduction of monsoon



Decrease in rain fall

### Vegetation and Plant



- Decrease in crop vegetation



- Increase in green house gases i.e. Global Warming

### Health



- Cancer



- Failed pregnancy



- Birth defect



- Death

## Hydrocarbons

Gasoline

Petrol

Coal

Kerosene

Used as fuels, industries, manufacturing sector

60% air pollution is due to automobiles that run on these hydrocarbon based fuels release NO and Hydrocarbons

This NO is converted to NO<sub>2</sub>

$\text{NO}_2 \rightarrow \text{NO} + \text{O}$  (in presence of sunlight)

$\text{O} + \text{O}_2 \rightleftharpoons \text{O}_3$

$\text{NO} + \text{O} \rightarrow \text{NO}_2 + \text{O}_2$

O<sub>3</sub> and NO<sub>2</sub> oxidize hydrocarbons and smog is

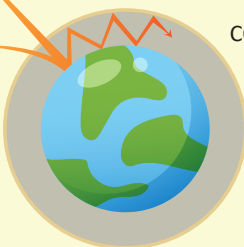
## Gaseous Pollutants

### Oxides of carbon

#### Causes of green house effect



Some sunlight that hits the earth is reflected. Some becomes heat.



CO<sub>2</sub> and other gases in the atmosphere trap heat, keeping the earth warm.

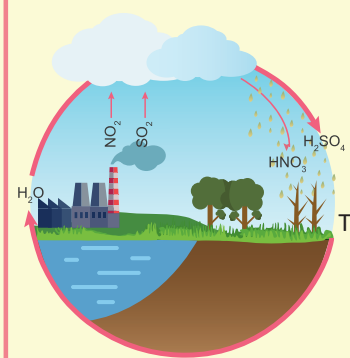
### Oxides of Nitrogen

#### Respiratory disease



### Oxides of Sulphur

#### Acid Rain



Trees killed by acid rain