# THEME 3 BALANCE AND MANAGEMENT OF THE ENVIRONMENT

**LEARNING AREA** 

PRESERVATION AND CONSERVATION OF THE ENVIRONMENT

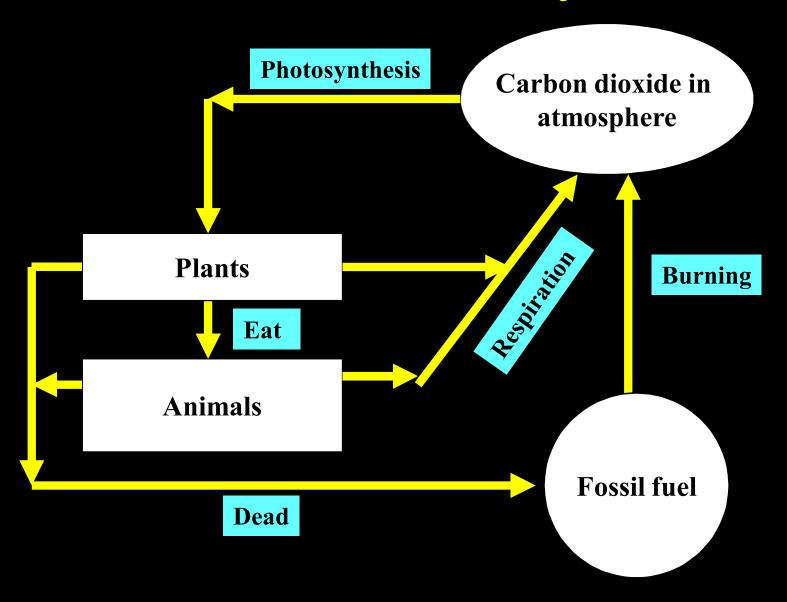
### Balance In Nature

• Interaction among animals, plants and the abiotic or non-living parts of environment

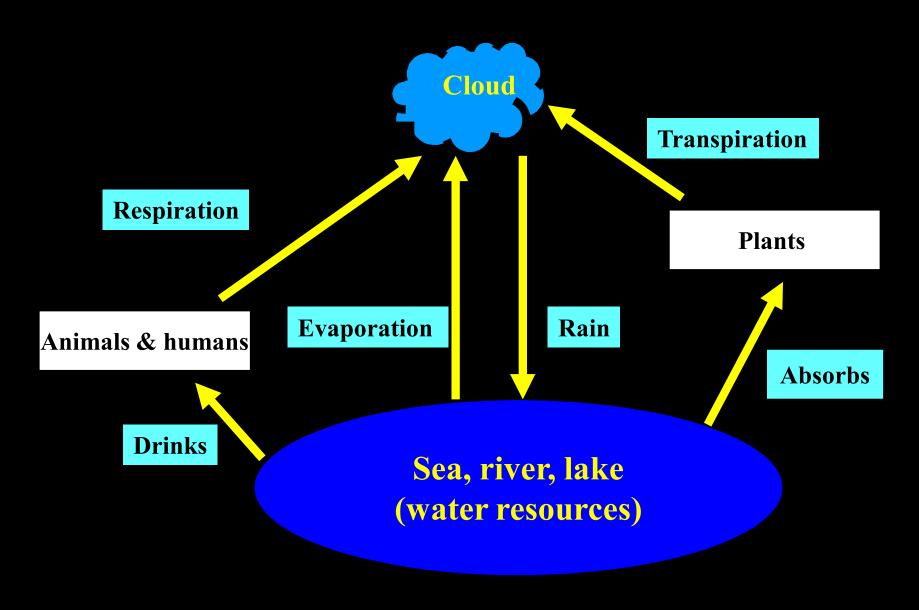
## Natural cycles

- Nitrogen cycle
- Carbon cycle
- Water cycle

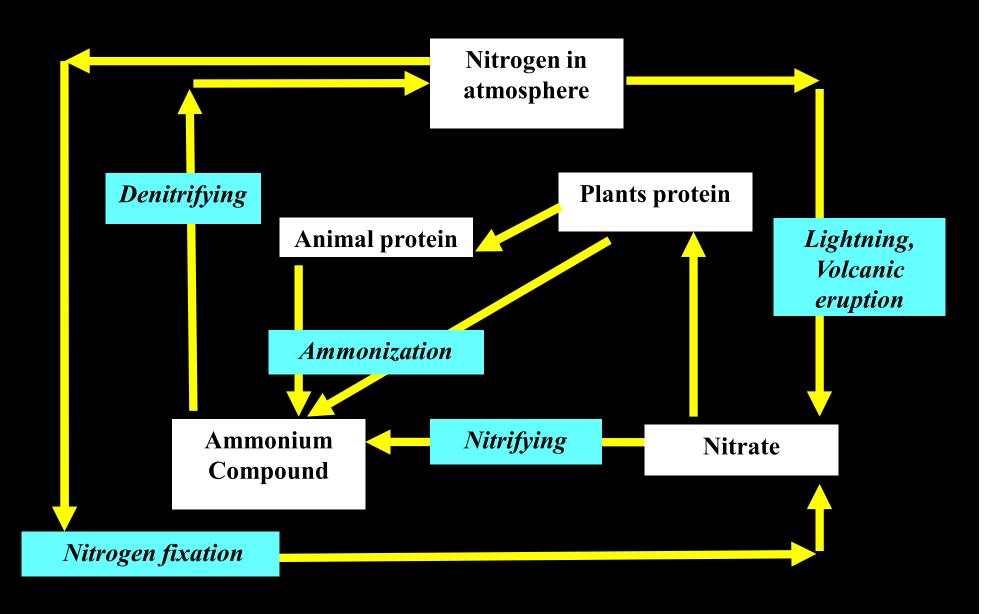
## The Carbon Cycle



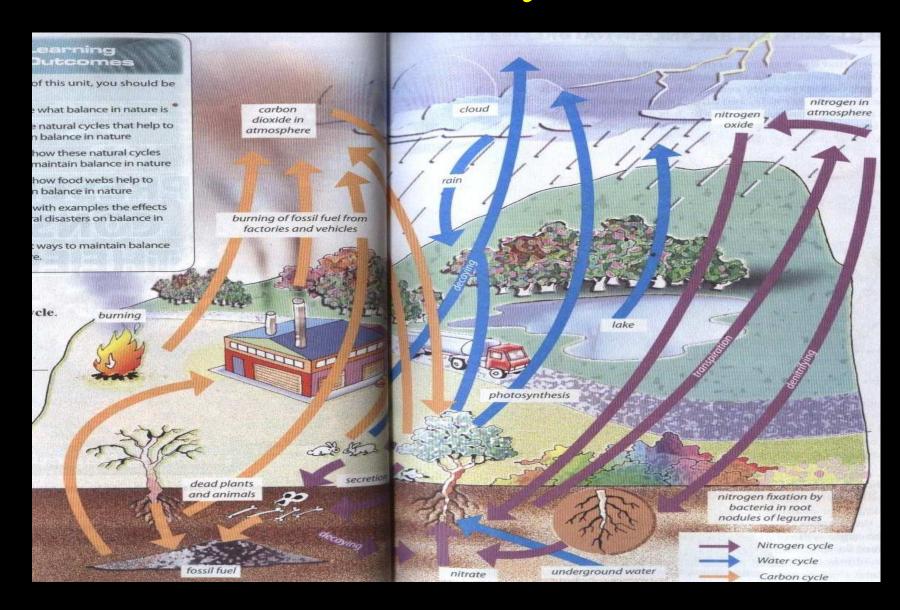
## The Water Cycle



## The Nitrogen Cycle



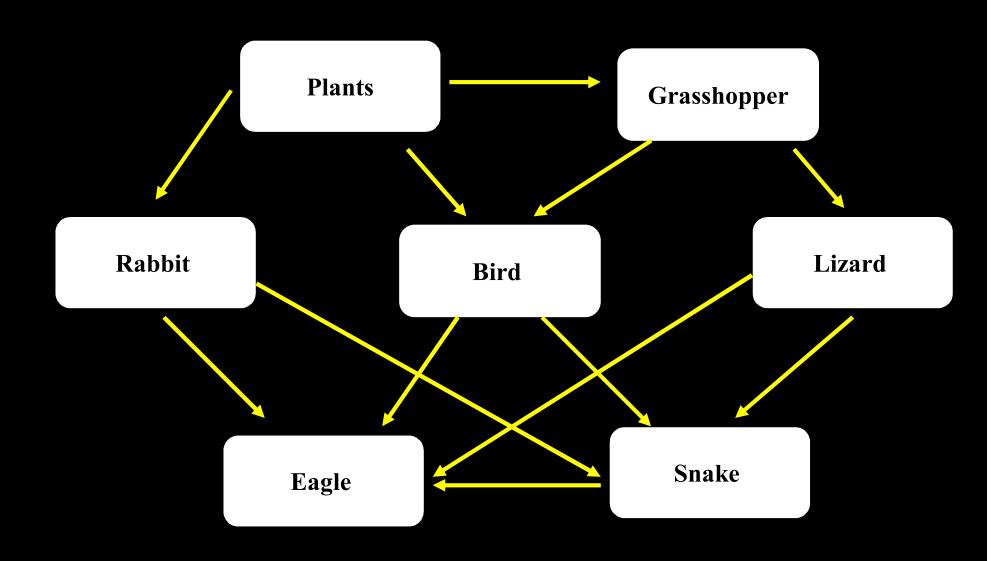
## Natural Cycle



### Food Web

- Food chain series of living thing each of which is eaten by the next in line
- Food web series of interlinked food chains
- The function of food web:
  - to maintain balance in nature by controlling the number of organisms at every trophic level in a food chain

## Food Web



## Pyramids of Numbers

Eagle (tertiary consumer)

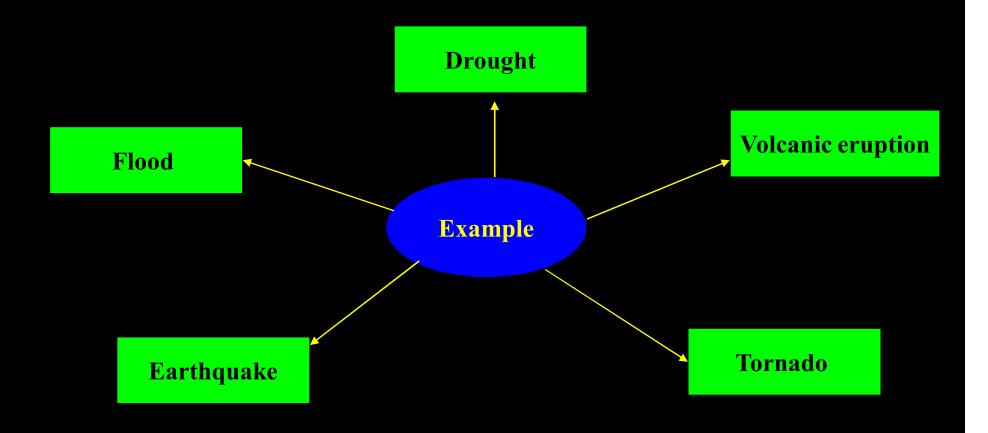
50
Birds
(secondary consumer)

50000 Grasshoppers (primary consumer)

**Grass (producers)** 

### Natural Disaster

• Natural disasters are natural phenomena that can affect the balance in nature.



## Natural Disaster











## Types of environmental pollution

- Air pollution
- Water pollution
- Soil pollution
- Pollution cause by solid waste
- Pollution cause by hazardous waste
- Noise pollution



## Environmental Pollution











#### Use of CFC

In

- aerosols,
- air conditioner
- refrigerators

#### Agriculture

The uncontrolled use of

- chemical fertilizers
- pesticides
- fungicides

#### Fossil fuels

Uncontrolled uses in daily life

The sources of environmental pollution

#### Vehicles and Machineries

The production of

- noises
- smoke
- poisonous gases

#### **Industries**

The disposal of by

- products
- wastes
- toxic substances
- radioactive substances
- smoke
- heat

#### **Domestic Waste**

Such as rubbish waste and sewage

Damage of the ozone layer

Use of CFC

Effects of environmental pollution

Haze

Air pollution by open burning

**Extinction of species** 

Water pollution by use of toxic substances, chemical fertilizer, rubbish

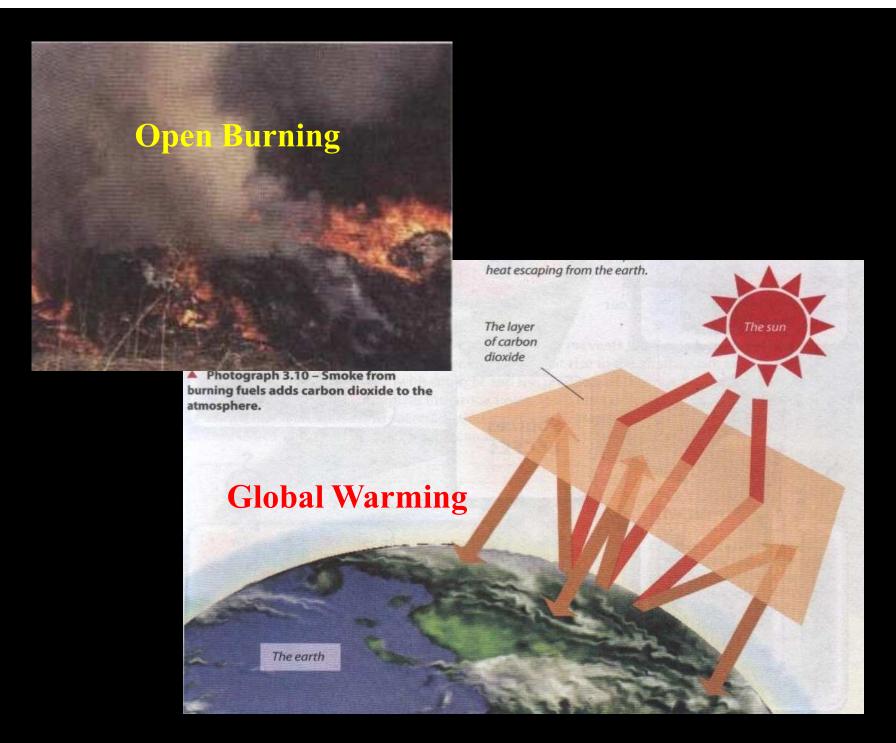
The polar ice melt

Global warming by green house effect

## Global Warming

Global warming - the term used to describe the way in which increasing levels of carbon dioxide in the air causing a rise in average temperature around the world

The dense layer of carbon dioxide traps the Sun's heat around the Earth causing the Greenhouse effect



## Ozone layer

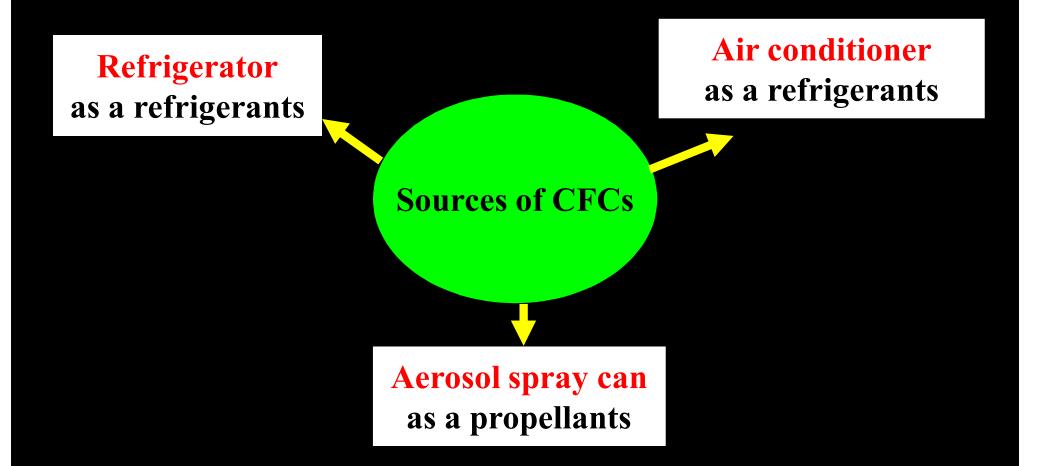
Ozone layer - a layer of ozone gas that absorbs most of the Sun's harmful ultraviolet radiation, preventing it from reaching the Earth

## The importance of ozone layer

The ozone layer acts as a protective shield which prevents the Sun's harmful ultraviolet radiation from reaching the Earth

### Chlorofluorocarbon (CFC)

is the chemical that can damage the ozone layer



Damage living organisms

Immune system deficiency

**Eye disease**Cataract

The affects of damaging ozone layer

Skin cancer

Damage plants
Reducing
agriculture production

## Preservation and conservation of the environment and pollution control

To manage the natural resource which maybe renewable or non-renewable

Helping the environment to recover from destruction by human activities

The importance of preservation and conservation of the environment

To maintain the natural environment

National Park
preserve and conserve
the natural
environment

Factories should use filters that can remove harmful particles from smokestack emissions

Environment pollution control

Factories waste should be well treated so that it will not harm the environment

Government prohibits any kind of human activities that can destruct the forest

Using unleaded petrol
Helps to reduce
Pollution from the
car engine

The use of too much pesticides will disturb the balance between the living things

Mining and quarrying activities can cause environmental damage such as land erosion

Uncontrolled logging destroys natural habitats and ruins the ecosystem

The effects of improper management of natural resources

And cannot be reused so excessive use of fossil fuels can caused not enough natural resources in the future

Improper land clearing can caused flash flood especially when raining time

## Keep the environment clean





## Stop open burning

Responsible attitudes to preserve and conserve the environment

#### Plant more trees



## Recycle waste materials

