

# CH-7: Changes in Our Environment

Science Class: V



## Changes in Our Environment

### I. New Words:

- greenery
- environment
- interact
- gadgets
- smoke
- infrared
- methane
- rainforests
- landfills
- recycled
- temperature

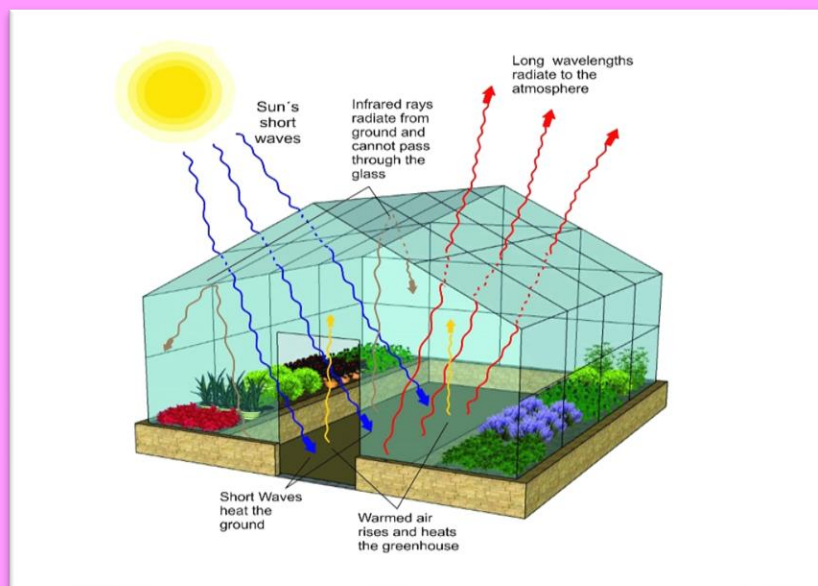
### II. Define:

1. **Global warming:** Greenhouse gases in the atmosphere traps the heat of the sun and there is a rise in temperature on the earth. This is called global warming.
2. **Pollution:** The presence of harmful substances in the air, land and water which can have adverse effects on living things and on the environment is called pollution.



### III. Short notes:

1. **Methane:** Methane is a natural gas which is a major contributor to global warming. It is released from landfills, wetlands and rice paddies. When grass eating animals digest their food their systems release a large quantity of methane into the atmosphere. It traps heat from the earth and makes it warmer.
2. **Greenhouse:** A greenhouse is a house made of glass that can be used to grow plants. The sun's radiation warms the plants and the air inside the greenhouse. The heat trapped inside can't escape out which is essential for the growth of plants.



#### IV. Give reason Why?

##### 1. **Destruction of rainforests leads to global warming.**

Destruction of rainforests releases carbon dioxide into the atmosphere. When the level of carbon dioxide increases, more heat will be trapped in the atmosphere and the temperature of the earth would increase which leads to global warming.

##### 2. **Humans are responsible for global warming.**

Humans are increasingly influencing the climate and the earth's temperature by burning fossil fuels, cutting down forests which adds enormous amount of greenhouse gases in the atmosphere increasing the greenhouse effect and global warming.

#### V. Answer these:

##### Q1. **What is a greenhouse effect? Name four greenhouse gases.**

Ans: Greenhouse effect is a natural process that warms the earth surface. When the sun's energy reaches the earth's atmosphere, some of it is reflected back to the space and some is absorbed and re-radiated by greenhouse gases. The absorbed energy warms the atmosphere and the surface of the earth.

**The four major greenhouse gases are:**

- a) Water vapour
- b) Carbon dioxide
- c) Methane
- d) Nitrous oxide

##### Q2. **How can we prevent pollution of air and water?**

Ans: The pollution of air and water can be prevented in the following ways:

- a) Automobile engines should be redesigned to reduce emission of harmful gases in the air.
- b) Increasing forest cover.
- c) Reduce usage of pesticides, fertilizers and herbicides.
- d) Increase awareness in public about the ill effects of water pollution.

- e) People should avoid using vehicles for shorter distance.
- f) The use of solar, wind and geothermal energies reduce air pollution at a larger level.


**Q3. State some of the effects of global warming.**

Ans: Following are major effects of global warming:


- a) Rise in temperature.
- b) Threats to the ecosystem
- c) Climate change
- d) Loss of natural habitat
- e) High mortality rates.



## Book Work



# Changes in Our Environment




**Get started!**

Circle the things that are bad for our environment.

saving water   burning fuels   planting trees  
cutting down trees   plastics   reusing or recycling

## CHECKPOINT



### ENRICHMENT ACTIVITY

Circle the correct answers.

1. A greenhouse is a ( glasshouse / hut / concrete house ) where we grow plants.
2. ( Water vapour / Methane / Ozone ) causes 35–75% of greenhouse effect.
3. CFCs are widely used in ( refrigerators / TVs / car engines ).

## Read and ANSWER



234

### A. Tick (✓) the correct answers.

- The increase in the number of factories and vehicles has resulted in the increase of  
a. carbon dioxide. ✓ b. water vapour. \_\_\_ c. methane. \_\_\_ d. oxygen. \_\_\_
- The earth's atmosphere is a blanket of  
a. dust particles. \_\_\_ b. water vapour. \_\_\_ c. wool. \_\_\_ d. gases. ✓
- Which of the following gases is not a greenhouse gas?  
a. carbon dioxide \_\_\_ b. oxygen ✓ c. methane \_\_\_ d. CFCs \_\_\_
- The change in climate is leading to the  
a. melting of ice at the poles. \_\_\_  
b. rise in water levels of oceans. \_\_\_  
c. frequent flooding of places near the sea. \_\_\_  
d. all the above ✓
- Trees help to clean the  
a. monuments. \_\_\_ b. water. \_\_\_ c. air. ✓ d. land. \_\_\_

### B. Match the columns.

- |  |   |
|--|---|
| 1. spilling of oil into the sea            | a. global warming (5)                       |
| 2. melting of polar ice caps               | b. refrigerators (4)                        |
| 3. animals give out this gas               | c. methane (3)                              |
| 4. CFCs                                    | d. harmful for water animals and plants (1) |
| 5. the process of the earth getting heated | e. effect of global warming (2)             |

## Worksheet

SCIENCE

# WORKSHEET 1

### CHANGES IN OUR ENVIRONMENT

A. Write T for True or F for False.

1. Our environment consists of living and non-living things like air, water, land, plants and animals. T
2. We live in the same environment where our <sup>great</sup> grandparents lived. F
3. Human activities are disturbing the wildlife habitats. T
4. Oxygen has the property of trapping heat of the sun. F
5. Carbon dioxide and methane are greenhouse gases. T

B. Fill in the blanks.

1. The earth's atmosphere is a blanket of gases
2. A greenhouse is a glass house where we grow plants
3. Ozone is found in the stratosphere
4. Pollution means the spoiling of land, air and water.
5. Trees help to keep the air clean.



## WORKSHEET 2

## CHANGES IN OUR ENVIRONMENT

## A. Tick (✓) the correct options.

- Which of the following changes the environment to suit their needs?  
a. animals  b. humans  c. trees
- Burning of fossil fuels releases  
a. oxygen.  b. carbon dioxide.  c. ozone.
- Which of the following is not a greenhouse gas?  
a. nitrous oxide  b. methane  c. oxygen

## B. Fill in the blanks.

- All the living and non-living things that surround us make our environment
- Water vapour accounts for 35-75 % of the greenhouse effect.
- Ozone is naturally found in the stratosphere

## C. Give one word for the following.

- The gases that cause greenhouse effect Greenhouse gases
- A greenhouse gas needed for photosynthesis Carbon dioxide
- Overall increase in the temperature of the Earth's atmosphere due to greenhouse effect Global Warming