

# Carbon Cycle and Global Warming

Biosphere def: \_\_\_\_\_

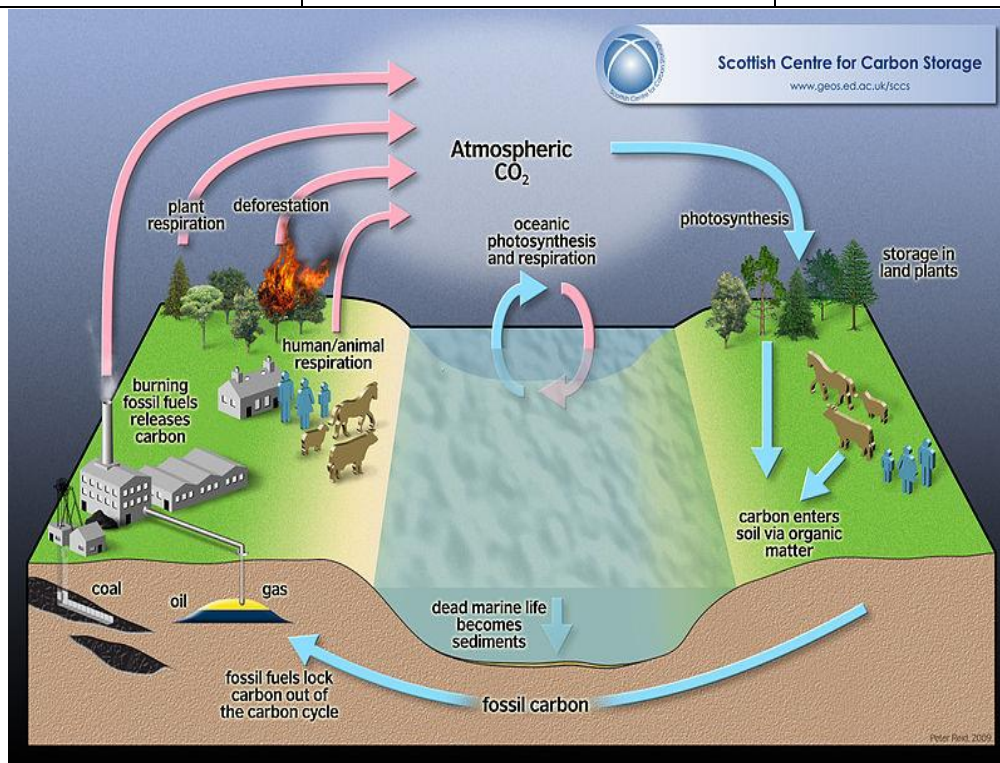
- Made up of the lithosphere, hydrosphere and atmosphere

## Carbon Cycle

Def: \_\_\_\_\_

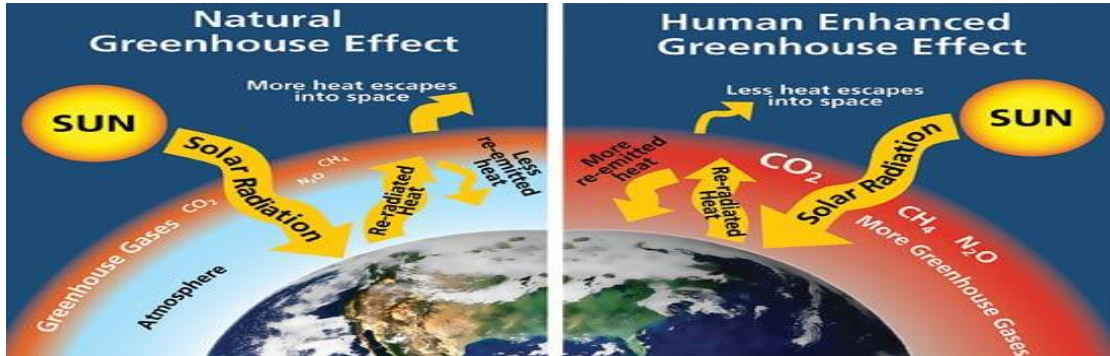
### 3 forms of Carbon

CO <sub>2</sub>	CH <sub>4</sub>	CaCO <sub>3</sub>

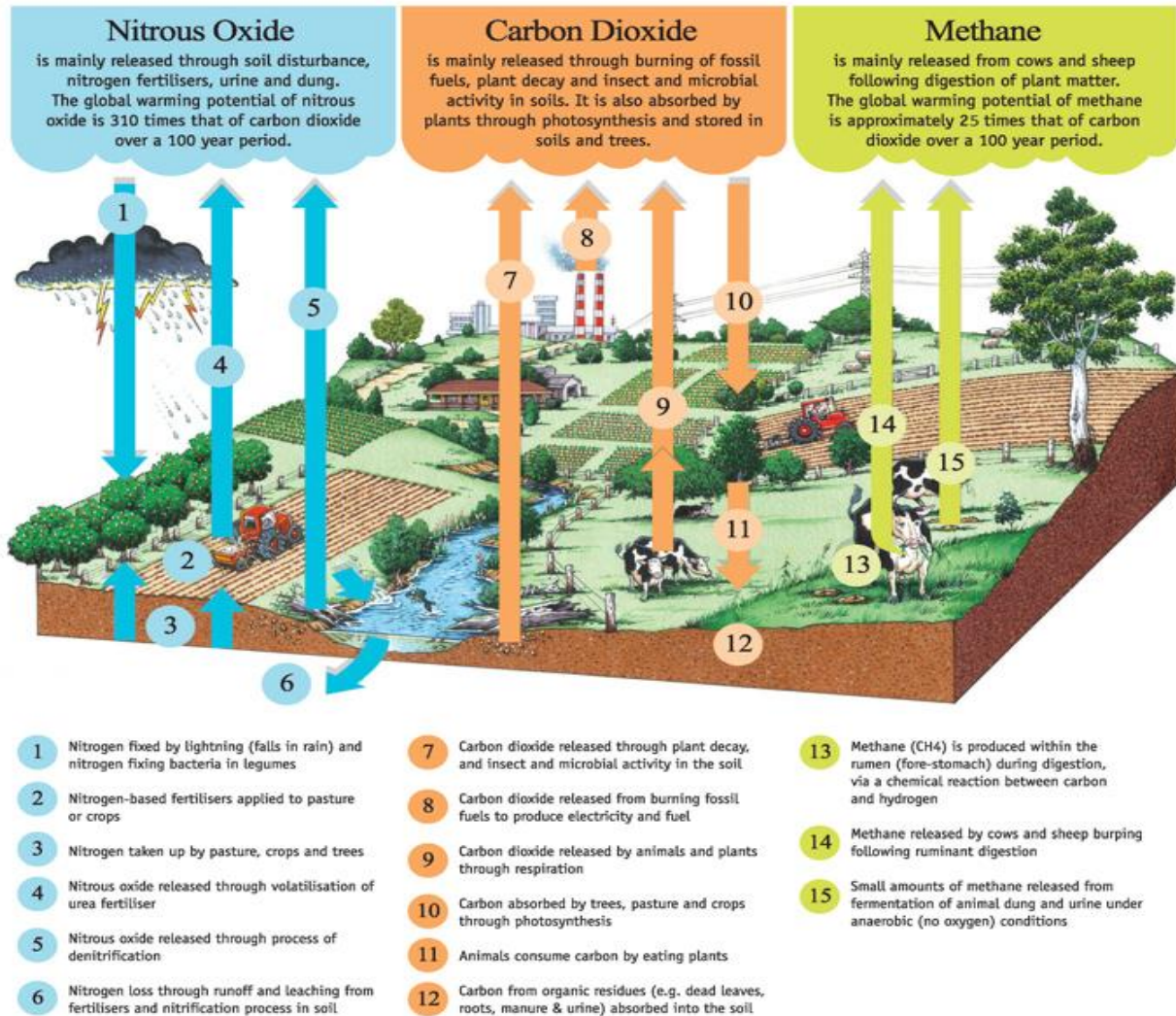


Process which take in CO <sub>2</sub>	Process which release CO <sub>2</sub> and methane

## Global Warming (greenhouse effect):



## Pollutants:



**Important facts:**

- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

**Negative effects of Global Warming**

- 1- \_\_\_\_\_
- 2- \_\_\_\_\_
- 3- \_\_\_\_\_
- 4- \_\_\_\_\_
- 5- \_\_\_\_\_
- 6- \_\_\_\_\_

**The Permafrost**

Def: \_\_\_\_\_



- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

# Consequences of thawing permafrost

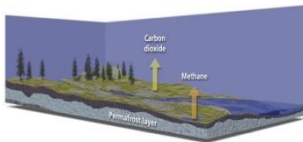
1. \_\_\_\_\_

\_\_\_\_\_



2. \_\_\_\_\_

\_\_\_\_\_



3. \_\_\_\_\_

4- \_\_\_\_\_

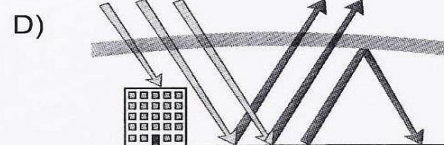
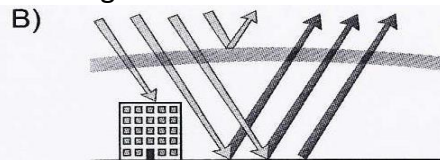
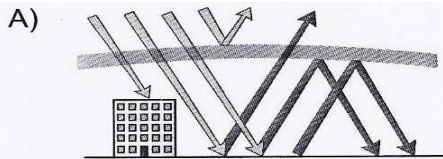
5- \_\_\_\_\_

## Past exam questions

1. Which of the following is not a consequence of the warming of the permafrost?

- A) Landslides
- B) Unstable infrastructure (buildings and roads)
- C) A decrease in the amount of vegetation
- D) The release of greenhouse gases

2. Which of the diagrams correctly represents the greenhouse effect?



3. Which of the following choices (A, B, C and D) correctly matches each natural phenomenon with its impact on the quantity of atmospheric CO<sub>2</sub>?

	A volcanic eruption	Photosynthesis	A dissolution of atmospheric CO <sub>2</sub> in the ocean
A)	Increases CO <sub>2</sub>	Decreases CO <sub>2</sub>	Decreases CO <sub>2</sub>
B)	Increases CO <sub>2</sub>	Increases CO <sub>2</sub>	Decreases CO <sub>2</sub>
C)	Decreases CO <sub>2</sub>	Decreases CO <sub>2</sub>	Increases CO <sub>2</sub>
D)	Decreases CO <sub>2</sub>	Increases CO <sub>2</sub>	Increases CO <sub>2</sub>

4. Global warming could have a significant impact on polar regions. Authorities have therefore thought about moving certain northern villages because roads could become unfit for travel and landslides could occur. Large quantities of methane and carbon dioxide could be released into the air. What is responsible for these consequences of global warming?

- A) Forest decline  
 B) Increasing precipitation  
 C) A change in the flow of water in a drainage basin  
 D) Melting permafrost

5. In nature, carbon follows a cycle and moves through the Earth's different spheres, namely the atmosphere, the biosphere, the hydrosphere and the lithosphere. Which of the following human activities has the least influence on the carbon cycle?

- A) Intensive tree cutting  
 B) Raising dairy cows  
 C) Burning fossil fuels  
 D) Operating a nuclear power plant

6. It is said that using wood to build houses helps in the fight against climate change because trees store some of the atmospheric carbon. Through what carbon cycle process do trees store atmospheric carbon?

- A) Photosynthesis  
 B) Cellular respiration  
 C) Plant decomposition  
 D) Fossil fuel combustion