

Biosphere and Cycle Notes

Biosphere def: _____

3 parts:

Lithosphere: _____

Hydrosphere: _____

Atmosphere: _____

Biogeochemical cycle

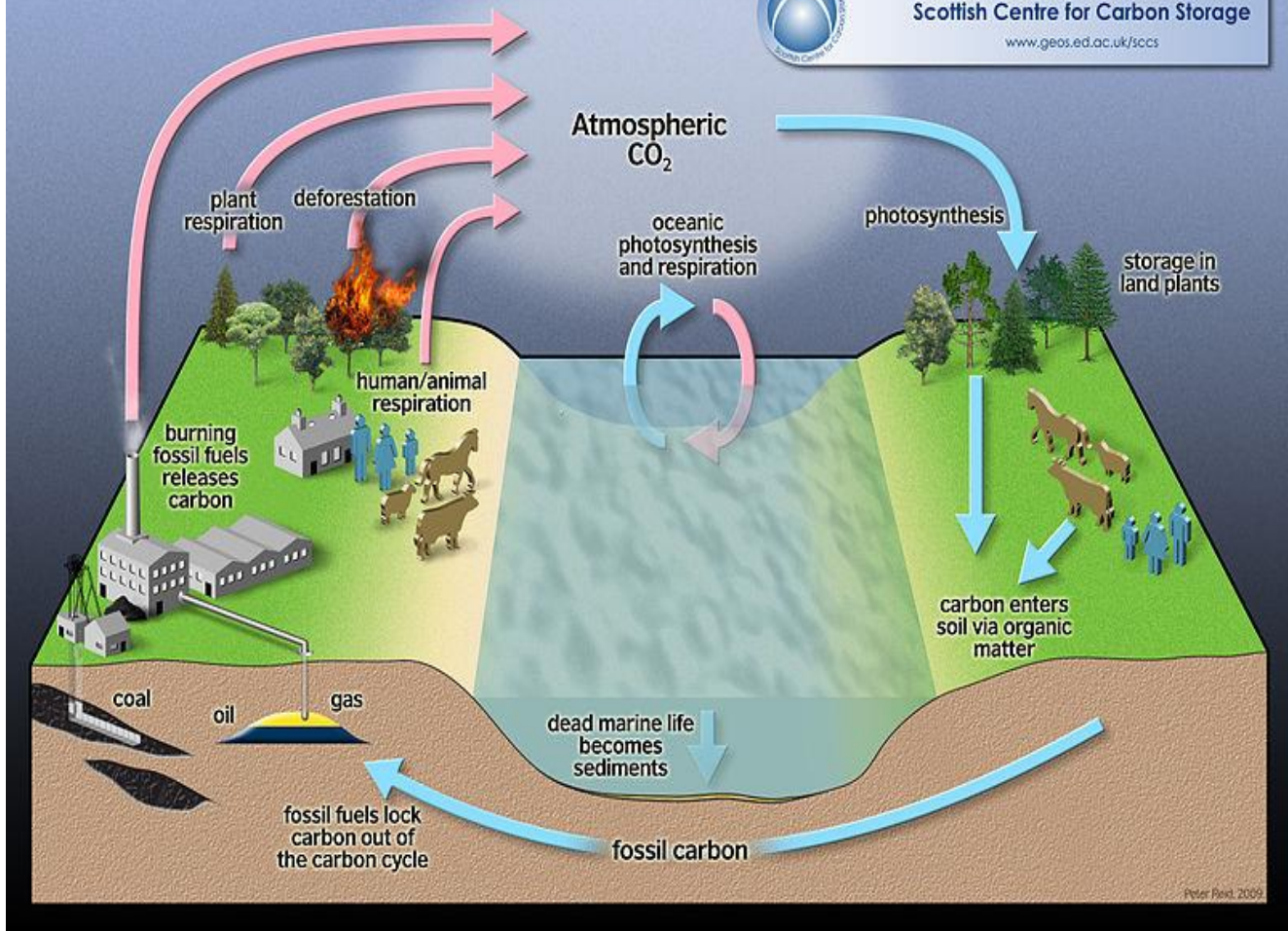
Def _____

Carbon Cycle

Def: _____

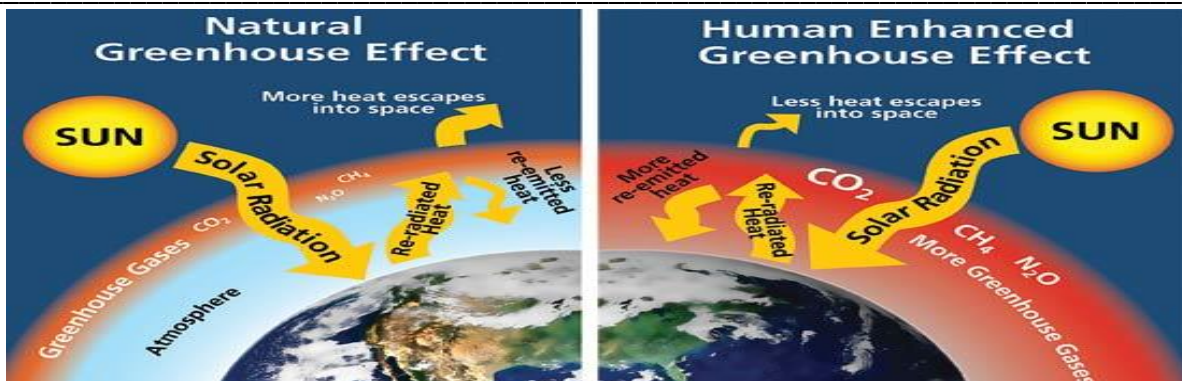
3 forms of Carbon

CO_2	CH_4	CaCO_3



Process which take in CO ₂	Process which release CO ₂ and methane

Global Warming (greenhouse effect):



- Pollutants: CO₂, CH₄ and N₂O

Negative effects of Global Warming

1- _____

2- _____

3- _____

4- _____

5- _____

6- _____

The Permafrost

Def: _____

- In some areas, the top layer of the permafrost, called the active layer, thaws only in the summer. The lower layer remains frozen. Plants can grow during this short period of time.
- The rise in global temperature has caused the permafrost to begin to thaw.

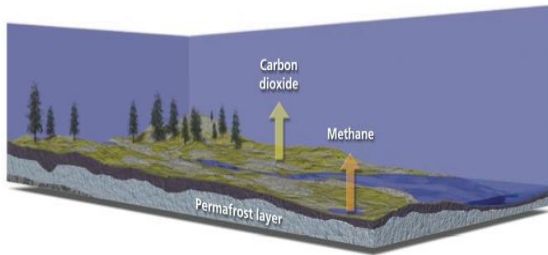
Consequences of thawing permafrost

1.



Joe Moore, State Soil Scientist (retired) USDA-NRCS

2.



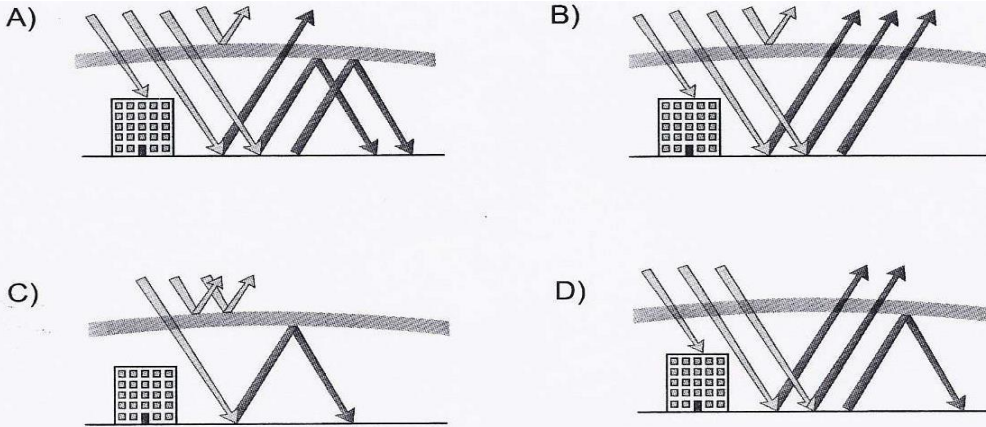
3- _____

4- _____

5- _____

Past exam questions

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



2. 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

3. Which of the following choices (A, B, C and D) correctly matches each natural phenomenon with its impact on the quantity of atmospheric CO₂?

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