



Monday, April 24, 2017

Pick up: self check

Today you will:

- Self check
- DSQ ISN pg 214
- Biodiversity & Human Impacts

[Ocean Acidification](#)

Homework/Planner:

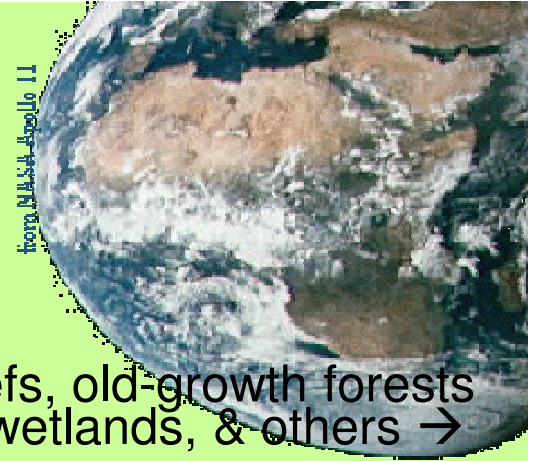
EOC Study Guide Questions 184-225 due Friday

HONORS-Case study due Thursday.

Intro to Biodiversity

- https://www.youtube.com/watch?v=GK_vRtHJZu4

BioDiversity



3 General Types:

1. Habitat diversity:

- refers to variety of places where life exists: coral reefs, old-growth forests in the Pacific Northwest, tall-grass prairies, coastal wetlands, & others → each a home for a variety of species

2. Genetic diversity:

- variety of genes within a population

3. Species diversity:

- variety of species
- what most people mean when they talk about biodiversity
- Tropical rainforests cover less than 2% of the planet & yet are the only home of at least 50%- 90% of all species on earth → provides food, shelter, medicines, oxygen, prevents erosion, etc.

- *The survival of each is linked to the health of the other two, and together they comprise the wealth of ecosystems.... The Earth!!!!*

Renewable Resources

- A natural resource → **can be replaced** by natural processes at a rate comparable or faster than its rate of consumption by humans.
 - Solar radiation
 - Tides
 - Winds
 - Hydroelectricity
 - May also mean wood, paper, leather, timber, if harvesting is performed in a sustainable manner.
- Sustainable- sustainability describes how biological systems remain diverse and productive over time



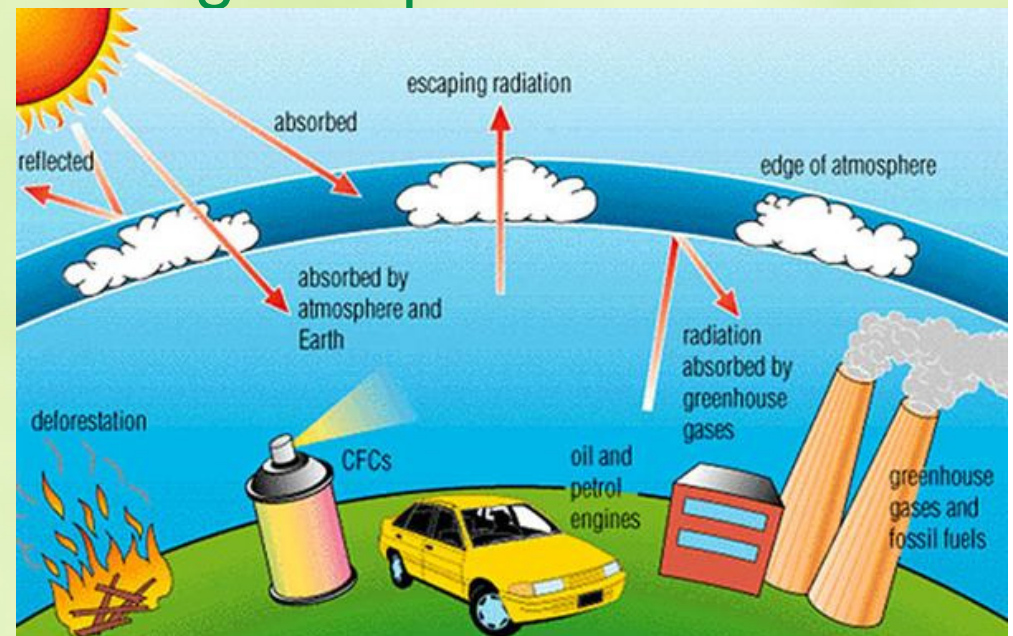
Non-renewable Resources

- A natural resource that **cannot** be produced, re-grown, regenerated at the same rate as its consumption
- Exist in a fixed amount, or is consumed much faster than nature can recreate them.
 - Fossil fuel (such as coal, petroleum and natural gas) is an example.
 - Water



Greenhouse Effect

- The rise in temperature of Earth b/c of certain gases in the atmosphere trap heat (like a greenhouse)
 - ex: carbon dioxide, nitrous oxide, and methane
- Without these gases, heat would escape back into space and Earth's avg. temp would be about 60°F colder.



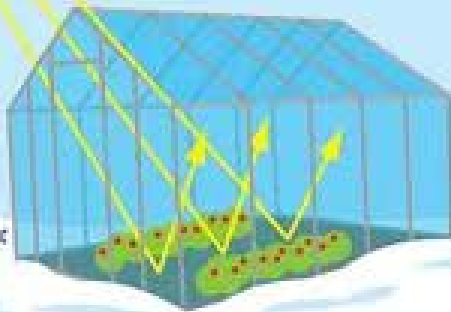


The Greenhouse Effect

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

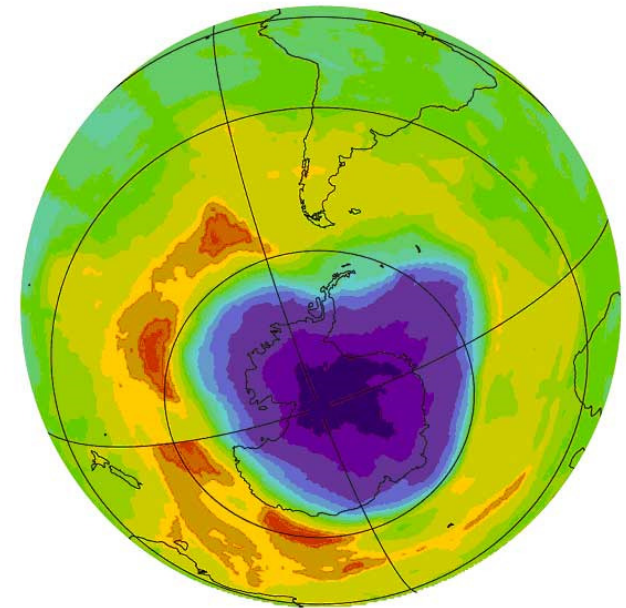
CO₂ and other gases in the atmosphere trap heat, keeping the earth warm.

ATMOSPHERE

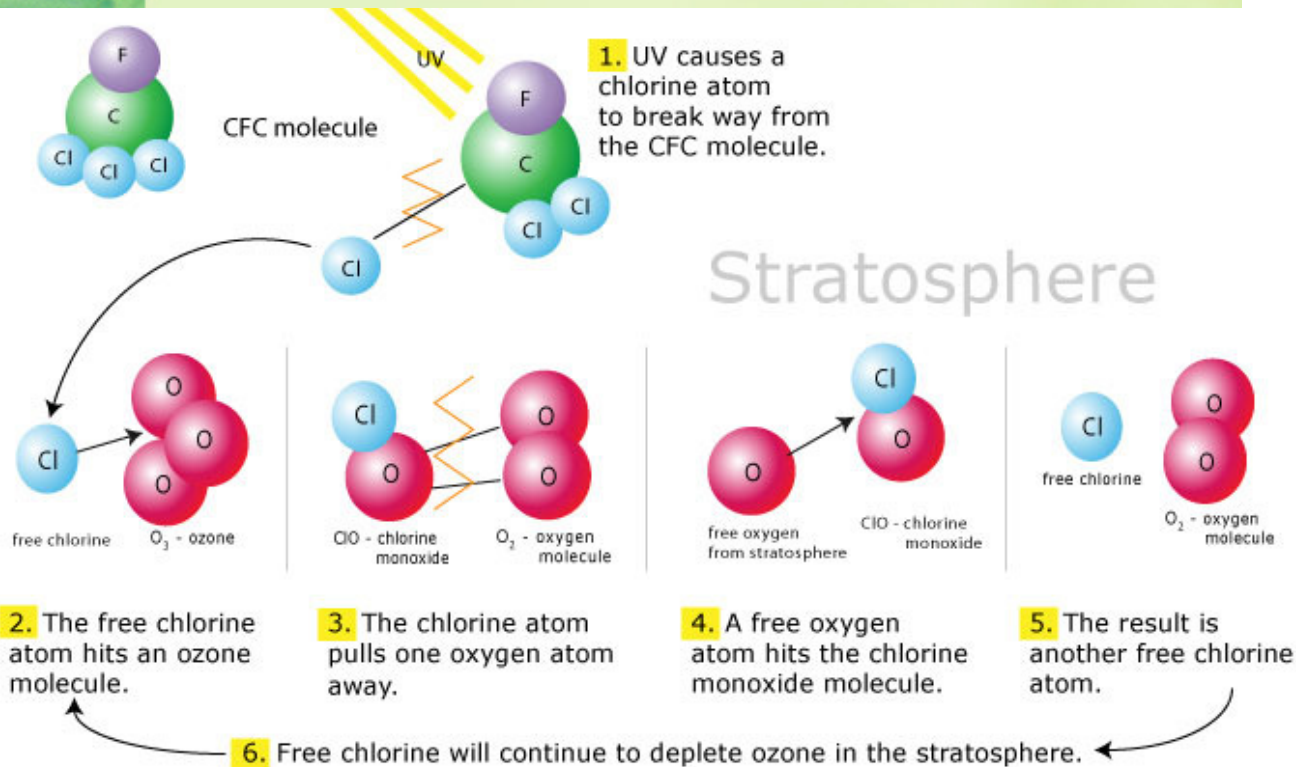
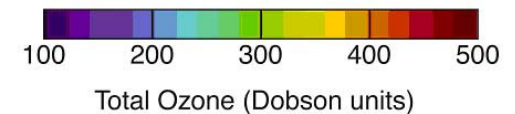


- Protects the earth from potentially damaging doses of UV radiation.
- Depletion of ozone lead to adverse health effects & impacts to ecosystems.

Antarctic Ozone Hole



4 October 2001



Ozone

Biological Magnification

- The buildup of certain substances, such as DDT, in the bodies of organisms at higher trophic levels.
1. *Where is there MORE DDT in the diagram to the left?*
 2. *What happens if the Great Blue Heron dies out due to insecticide build up from biological magnification?*

DDT = dichloro
diphenyl
trichloroethane

