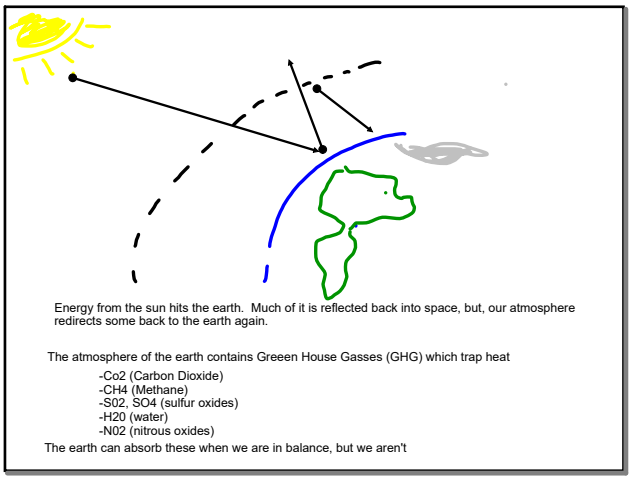


Energy from the sun hits the earth. Much of it is reflected back into space, but, our atmosphere redirects some back to the earth again.

The atmosphere of the earth contains Greeen House Gasses (GHG) which trap heat

- -Co2 (Carbon Dioxide)
- -CH4 (Methane)
- -S02, SO4 (sulfur oxides)
- -H20 (water)
- -N02 (nitrous oxides)

The earth can absorb these when we are in balance, but we aren't

Feb 10-11:44 AM

Carbon "Sinks"

Carbon sinks are natural places where the earth can absorb and store carbon

Forests

Terrestrial plants absorb carbon for photosynthesis- they convert it to sugar (Bio 30)

Permafrost

Some carbon absorbed from the forests returns to the soil as the tree dies and decays. This becomes locked in an icy layer that stays frozen year-round called permafrost (makes sense if you dissect the word)

Oceans

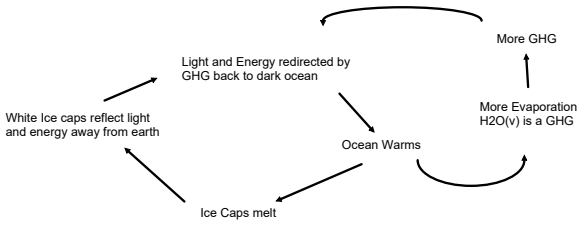
The phytoplancton and corals in the ocean can absorb about 50% of the CO2 from the atmosphere

Feb 13-9:17 AM

Feedback Loops

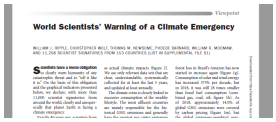
Create your own!

Feedback Loop in Nature



Feb 13-9:27 AM

World Scientists Warning of a Climate Emergency, Ripple et. al. (2019)



Viewpoint

World Scientists' Warning of a Climate Emergency

WILLIAM J. RIPPLE, CHRISTOPHER WOLF, THOMAS M. NEWSOME, PHOEBE BARNARD, WILLIAM R. MOOMAW, AND 11,258 SCIENTIST SIGNATORIES FROM 153 COUNTRIES (LIST IN SUPPLEMENTAL FILE S1).

1. What were the years and locations of the major climate summits (meetings)?

2. Finish the quote:

"The climate crisis is closely linked to..."

3. Select three of the graphs that are of interest to you and copy them into your journal, an example:

Per capita meat production

4. The article finishes by offering suggestions on what needs to change in different categories, summarize them with a jot note or two bellow:
- -Energy
- -Short-lived pollutants
- -Nature
- -Food
- -Economy
- -Population

Feb 13-10:25 AM