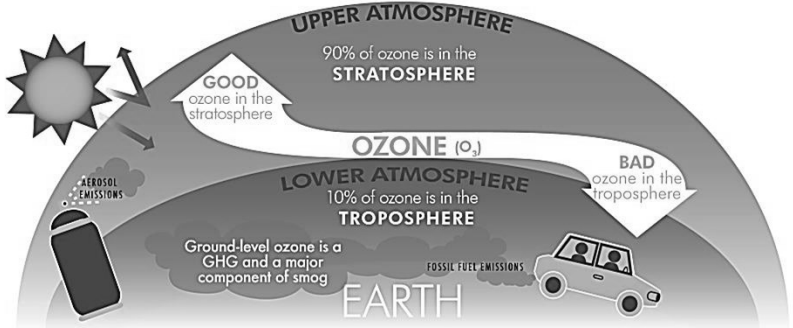
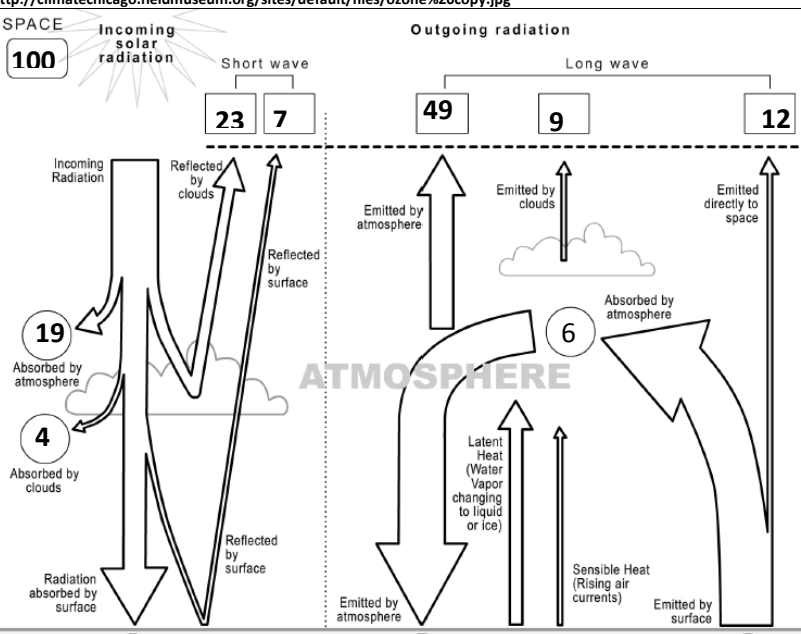


Earth/Environmental Science Homework

Week 5&6: February 23rd – 27th
DUE DATE: Friday, February 27th

Vocabulary: Fill in the missing areas on the table below using your textbook, class activities and any other resources you find helpful.

Vocabulary Word	Definition	Example/Application/Diagram
Atmosphere	Thin layer of gases that surrounds the Earth.	Divided into four layers: <u>troposphere, stratosphere, mesosphere, and thermosphere</u>
Ozone Layer	A region of Earth's stratosphere that absorbs most of the Sun's UV radiation.	 <p style="font-size: small; text-align: center;"> http://climatechicago.fieldmuseum.org/sites/default/files/ozone%20copy.jpg </p>
Insolation	Incoming solar radiation (visible and ultraviolet) that reaches the troposphere and surface of the Earth.	 <p style="font-size: small; text-align: center;"> http://www.bcsience10.com/images/0_quiz-10.2-09.gif </p>
Albedo	Fraction of solar radiation reflected back into space (~30%)	

Key Questions from the Week: Answer the questions below pertaining to this week.

1. Name at least 4 things our atmosphere does for us:

- 1) Supplies Oxygen
- 2) Provides pressure appropriate for our bodies
- 3) Protects us from meteors and cosmic/solar radiation
- 4) Maintains temperature range necessary for life

2. How is the ozone layer beneficial to life on Earth's surface? Which layer of the atmosphere is it located?

The ozone layer blocks some of the sun's UV radiation (UV-C and some B) which otherwise would cause extreme harm to our skin and lives. It is located in the stratosphere.

3. What is the difference between ozone depletion and the ozone hole?

Ozone depletion is the steady decline in ozone (4% per decade) seen since the late 1970s. The ozone hole is a much larger springtime decrease in ozone over Earth's polar regions.

4. What causes the ozone hole?

One group of gases is particularly likely to damage the ozone layer are called CFCs (chloro-fluoro-carbons). CFCs are used in refrigerators, air conditioning systems and some fire extinguishers. Most countries have now stopped using new CFCs that can be released into the atmosphere.

Diagrams from the Week: Complete the diagram on Earth's early atmosphere and the composition of the atmosphere.

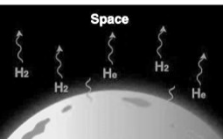
Earth's Early Atmosphere

#1
Helium and Hydrogen gases escaped Earth's gravity

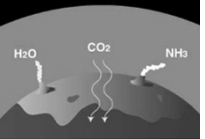
#2
Volcanoes give off gases. Carbon dioxide enters ocean and feeds bacteria which produce oxygen through photosynthesis

#3
Today's atmosphere, balance between animals and plants

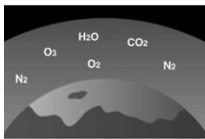
#1



#2



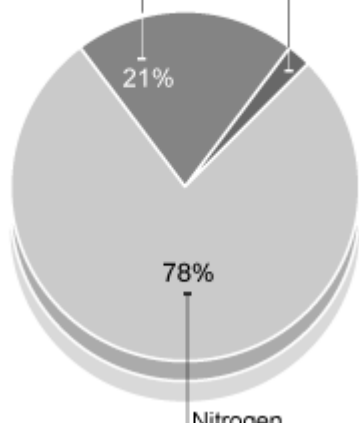
#3



Earth's Composition

Word Bank

- Oxygen
- Nitrogen
- Argon
- Carbon Dioxide



Other including:
Argon - 0.9%
CO₂ - 0.037%

Concept Map from the Week: Complete the concept map below. Each term in the word bank is used only once.

Word Bank

- Troposphere
- Oxygen
- Temperature
- Sun
- Nitrogen
- Pressure
- Radiation
- Stratosphere
- Atmosphere
- Thermosphere

