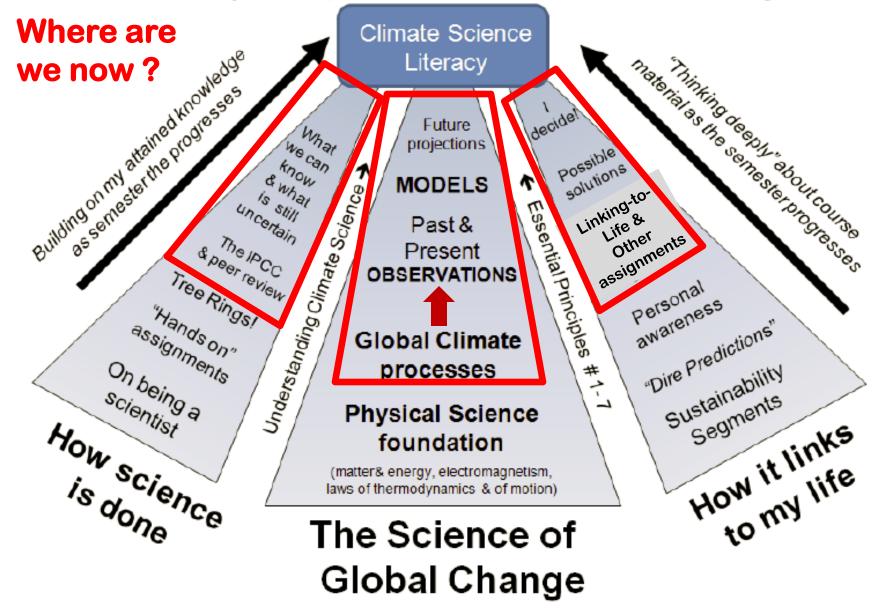
GOAL: Enhanced Understanding Of Global Change Science, How It Operates, & What It Means To Me Personally



# You are almost done!

(3 weeks of class remaining!)

TOTAL REMAINING
POINTS TO EARN = 200

**TESTS** 

1 RQ: RQ-9 (5 pts)

1 Test: Test #4 (25 pts)
&
the Final Exam (105 pts)

### GROUP ASSIGNMENTS

(In-Class Activities)



G-1 Understanding Absorption Curves [completed]



G-2 Tree Rings -Part I Wood Kits

[completed]



G-3 Tree-Rings - Part II The Amazing Bristlecone Pine Activity

[completed]



G-4 Applying the Energy Balance Terms

[completed]



G-5 Volcanism & Climate [completed]



G-6 Climate Action Debate Participation

(5 pts)

#### INDIVIDUAL ASSIGNMENTS

(Short Writing Assignments)



**I-1 Climate Science Basics** 

Lesson 1 CO<sub>2</sub> & the GH Effect [past due]



**I-2 Climate Science Basics** 

Lesson 2 Mother Nature's Influence [past due]



I-3 Climate Science Basics

Lesson 3 Observable Changes
[past due]



I-4 Climate Science Basics (10 pts)

Lesson 4 Intro to Climate Modeling

Due in dropbox Monday Nov 19



assignment

I-5 Class "Climate Action Debate" Preparation

Due in dropbox Friday Nov 30

(15 pts)

### LINKING-TO-LIFE PROJECT

(Individual Term Project in 4 Parts)

#### **OVERVIEW OF THE TERM PROJECT**

assignment







Part A Your Ecological Footprint

past due

Part B Thinking More Deeply

past due

Part C Film Review Discussion Posts

past due

Part D Final Project Report (35 pts)

## A few wrap-up questions to start. . . .

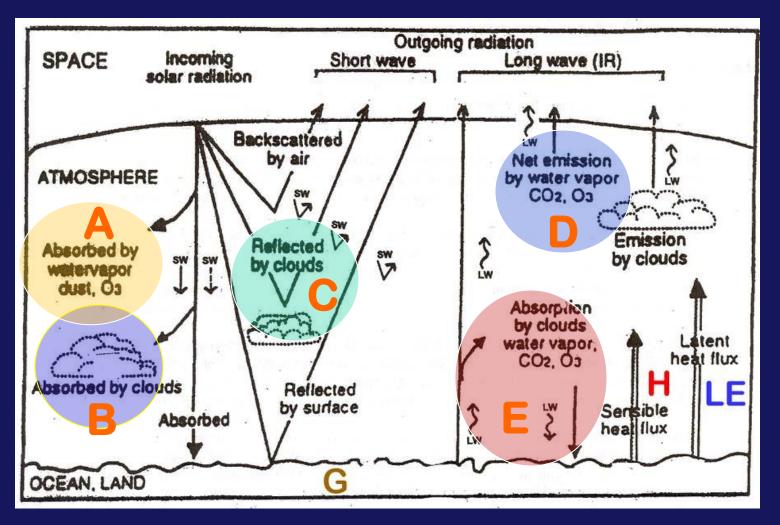
**CLICKER TIME!!** 

FLIP BACK TO
p 54 in CLASS NOTES

Tying things together in terms
of the Energy Balance

# Q1. In which part of the energy balance does the main activity related to STRATOSPHERIC OZONE DEPLETION take place?

A B C D E G

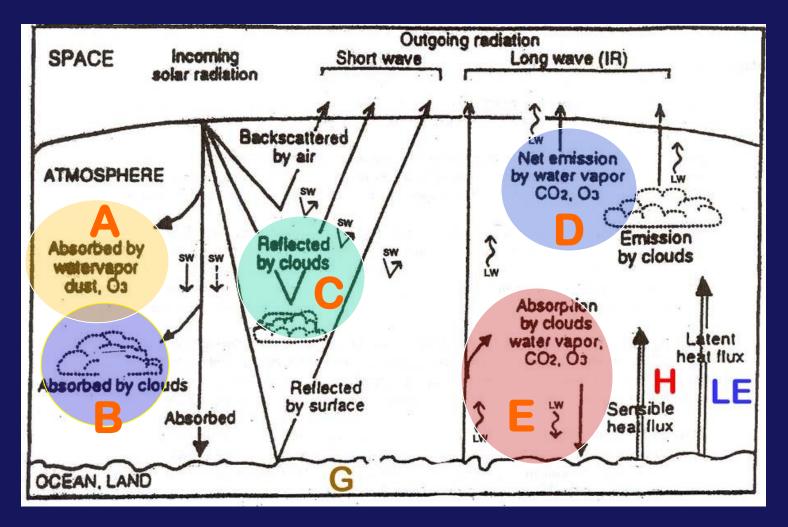


Q1. In which part of the energy balance does the main activity related to STRATOSPHERIC OZONE DEPLETION take place?

B G A Outgoing radiation SPACE Incomina Short wave Long wave (IR) solar radiation Backscattered by air Net emission **ATMOSPHERE** by water vapor CO2. O3 Emission Reflected Absorbed by by clouds SW SW by clouds wetervepor dust. Oa Absorblien by clouds water vapor heat flux CO2. O3 Absorbed by clouds Reflected by surface Sensible Absorbed healflux OCEAN, LAND

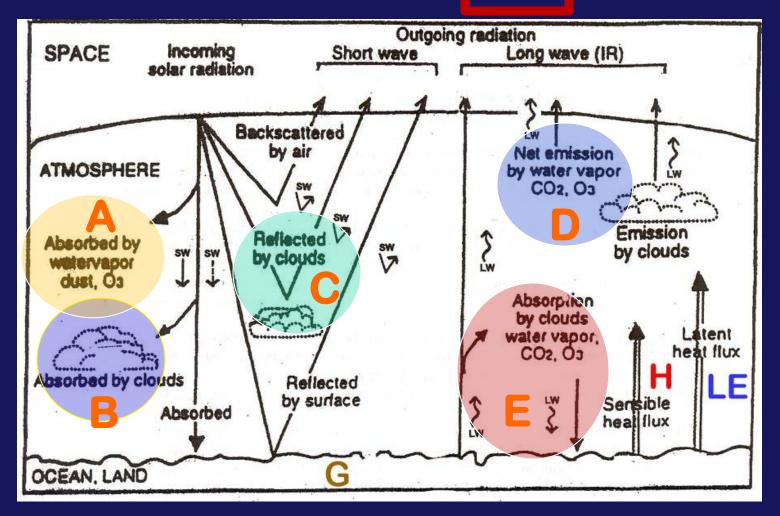
Q2. In which part of the energy balance does the activity related to GLOBAL WARMING from the enhanced GHE take place?

A B C D E G H



Q2. In which part of the energy balance does the activity related to GLOBAL WARMING from the enhanced GHE take place?

A B C D E G H



### Q3 – Which is the correct statement:

- 1 The depletion of STRATOSPHERIC OZONE in the Ozone Hole is a critically important <a href="CAUSE">CAUSE</a> of increased GLOBAL WARMING in the troposphere.
- 2 Increased GLOBAL WARMING in the troposphere is a critically important CAUSE of STRATOSPHERIC COOLING which could prolong or worsen the OZONE HOLE
- 3 Neither

### Q3 – Which is the correct statement:

- 1 The depiction of STRATOSPHERIC OZONE in the Ozone Hole is a critically important CAUSE of increased GLOBAL WARMING in the troposphere.
- 2 Increased GLOBAL WARMING in the troposphere is a critically important CAUSE of STRATOSPHERIC COOLING which could prolong or worsen the OZONE HOLE
- 3 Neither

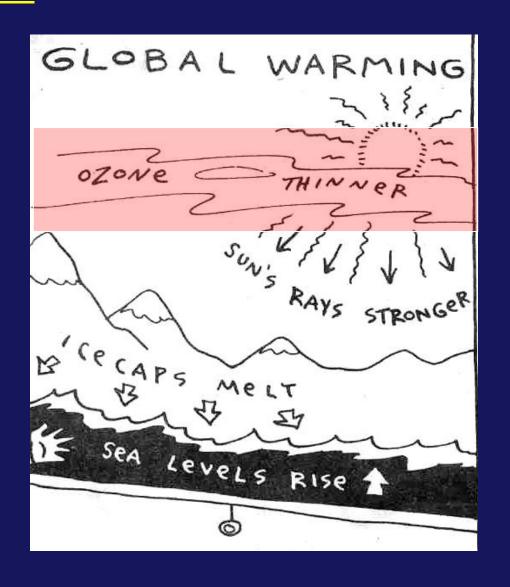
## Q4. Is this explanation of the <u>main</u> CAUSE of GLOBAL WARMING correct?



1-YES

2 - NO

## Q4. Is this explanation of the <u>main</u> CAUSE of GLOBAL WARMING correct?



1-YES

2 - NO