Air Pollution

Unit 5, Chapter 9

Air pollution is very real . . .

. . . and it effects many.

Watch and connect to your life, your career.

What causes air pollution?

Call it out. Are their natural causes?

Primary air pollution -- directly emitted from an identifiable source.

Secondary -- caused from a chemical reaction from things emitted into the air. (photochemical)
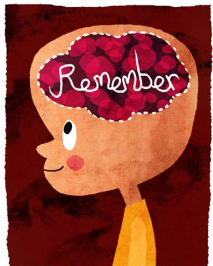
Dispersion and deposition

It's literally blowing in the wind.

❖ Airflow patterns
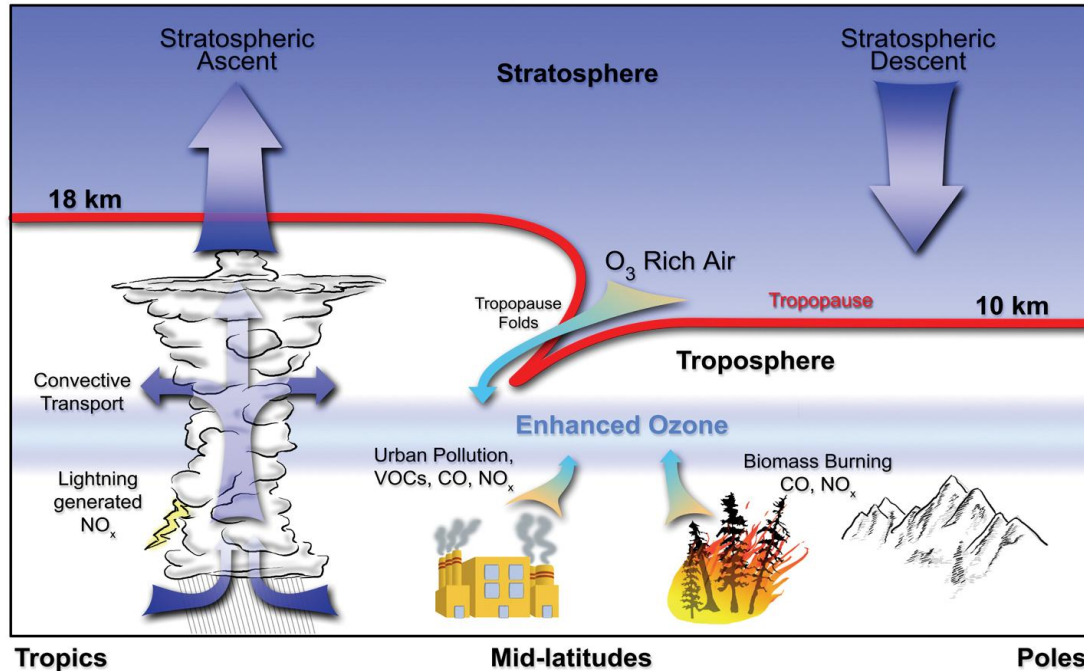 ➢ Temperature inversion
  ➢ Height of emission
  ➢ Residence time

Warm air rises.

❖ Wet versus dry deposition

Wet stick and dry floats.

Even the troposphere is in on it.

Acid Rain/
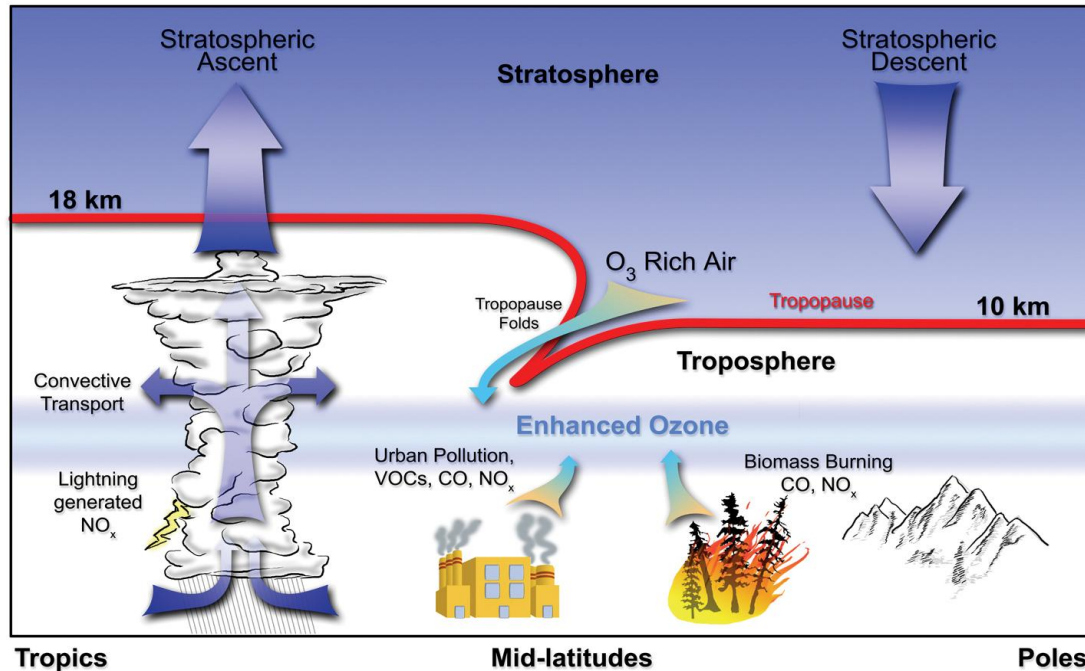
Acid deposition

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Metal

Follows the hydrologic cycle from factory to soil or water, into our foods, and into us.

Mercury poisoning

Super strat(osphere)

Aerosols at this level COOL the earth down.

Long residence time = more time to act.

Sulphuric compounds in the stratosphere are holding global warming at bay.

Bad for the ecosystem, though, because that would make the atmosphere more acidic. By a lot.

Ozone and it's hole

Back in the 80s, there was big hair and a problem.

CFCs in cans under pressure (like hairspray) were released into the troposphere every time we used them, and chemical reactions happened with the ozone layer... eating it away.

So, do what the cavemen do, right?

Indoor pollution is going to get you too.

- ❖ Indoor smoke (wood burning stoves)
- ❖ Cigarettes
- ❖ Our homes
- ❖ Even our appliances.

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Think about it…

We still don't know what we are doing.

International and national policies change frequently trying to stay ahead of our own destruction and demise.

(Hey, remember the environmental scientist is all doom and gloom? That's just a gentle reminder.)

unit homework

Chapter 8	Chapter 9	Extra credit

Chapter 8
- 8.3
  - 3
- 8.6
  - 1 - 2
- 8.7
  - 2

Chapter 9
- 9.1
  - 1,4
- 9.2
  - 1
- 9.3
  - 2

Extra credit

What is the purpose of an environmental policy? Give an example.

Hint: Use your policy you are using for your 2nd project for your example. Extra credit & work already done? Yes, it is that simple.

Due next class period.

Also due next class is your 2nd project!!!!