4/9-4/13 Air Pollution (Outdoor & Indoor)

**Assigned Reading:**
Env. Sci. p. 466-479, 485 - 493, and 496-507

**Outdoor Air Pollution- What to know**
* four possible effects of air pollution on vegetation

* four possible health effects of air pollution on human beings and other vertebrate animals

* what a synergistic effect is, and one example

* the difference between stationary sources and mobile sources and examples of each

* the difference between primary and secondary air pollutants and examples of each

* the dominant anthropogenic source of: sulfur dioxide, nitrogen oxides, carbon monoxide, and hydrocarbons

* the size range of particulate matter which is causes greatest damage to the lungs, and four examples of particulate matter in this size range

* why an atmospheric (thermal) inversion creates a potentially worse environment for air pollution

* four factors which determine the potential for severe/mild urban air pollution, and two examples of urban areas with severe air pollution problems

* why air pollution problems can potentially be worse in developing countries than in developed countries

* at least one main problem in establishing uniform air quality standards
Outdoor Air Pollution - Vocabulary

synergistic effect

stationary source

mobile source

fugitive source

primary pollutant

secondary pollutant

particulate matter pollutants

sulfur dioxide

carbon monoxide

nitrogen oxides

ozone

unburned reactive hydrocarbons (RH)

photochemical smog

atmospheric inversion
**Indoor Air Pollution - What to know**

* why it is that concentrations of indoor air pollutants are often greater than the same pollutant outdoors, and three examples

* why it is that home energy conservation and indoor air quality are often counteractive

* where radon gas comes from, its adverse health effect, why it is of concern inside buildings (where inside buildings?) and not outside of buildings

* mediation strategy for radon gas

* indoor sources of asbestos, (know at least two) and asbestos health risks

* indoor sources of formaldehyde (know at least two)

* indoor sources of volatile organic carbons (know at least three)

* strategies for reduction of indoor air pollution (know at least two)

**Indoor Air Pollution - Vocabulary**

- biological aerosols
- formaldehyde
- asbestos
- radon
- sick building syndrome
- volatile organic compounds (VOCs)