Chapter 1 Section 1 Notes

Environmental Science - <u>the study of the impact of humans on the environment</u> and involves the physical, biological, and social sciences. It's an <u>interdisciplinary science</u>. environmental scientists study:

- How our actions alter our environment.
- How we relate to the nonliving environment.
- The use of natural resources.

Major contributors are:

- Biology
- Earth science
- Chemistry
- Physics
- Social sciences

Hunter Gatherers

- live in tribes, collect plants, and hunt wild animals.
- affect environment by:
 - 1) Overhunting (causing extinctions).
 - 2) <u>Setting fires to burn prairies</u> prevents trees so hunting easier.
 - 3) Introduced plants to new regions.

Agricultural Revolution:

- 1) humans began living in more permanent settlements
- 2) Plants and animals were domesticated
- 3) Human populations grew

Industrial Revolution

- 1) Used fossil fuels
- 2) Efficiency increased
- 3) <u>City size grew</u>
- 4) Quality of life improved
- 5) increased pollution.
- 6) When most environmental problems began.

"Spaceship Earth"

Earth is essentially a closed system.

Environmental stresses due to population growth:

- Resource depletion
- habitat destruction
- pollution

Main Environmental problems:

- Resource Depletion
- Pollution
- Loss of Biodiversity

<u>Renewable resources</u> can be replaced relatively quickly by natural process.

Nonrenewable resources form at a much slower rate than they are consumed.

<u>Resource depletion</u> - Resources are depleted when a large portion of the resource has been used up. Creates pollution and wastes.

Pollution is an undesirable change in the natural environment

- two main types:
 - **<u>Biodegradable pollutants</u>**, broken down by natural processes
 - Nondegradable pollutants, cannot be broken down by natural processes
 - .

Biodiversity is the number and variety of organisms in a given area,

- Loss of biodiversity = declining number and variety of species in an area.
 - concerning because we depend on them for food, oxygen,