***What are our main Environmental Problems?***

There seems to be an unlimited number of environmental problems but almost all of them fall into one of three categories:

-Resource depletion

-Pollution (various forms)

-Extinction

Resource depletion and Pollution.

* We will use a population of a species of frog to outline some reasons why their populations are disappearing.
* loss of habitat (deforestation, farming etc.) human development has caused areas needed for populations to exist to be diminish.
* habitat is where an organism lives.
  + loss of habitat is a major cause of animal population decline.
  + air and water quality.

air pollution gets absorbed into the skin of a frog.

-reproduction rates decrease with increasing levels of acid rain.

* + increased exposure to ultraviolet radiation.
    - high levels of UV radiation burns skin and damages skin cells.
  + climate change.
    - higher temperatures are hard for frogs to adapt to.
* pollution has serious negative effects on animal population sizes.

Extinction.

* In Canada, there are more than 250 species of plants and animals at risk of extinction.
* between 8000 BC and 1600 AD, one species went extinct every 1000 years.
* 1600 – 1900 AD, one every four years.
* 21st C, one every thirty minutes.
  + in Canada, 80 species per year.
* natural disasters were the biggest threat to organisms previous to the presence of humans.
* over 500 million species have existed on Earth.
  + 90% have either become extinct or evolved.
* climate change is a cause for adaptation (or extinction).
* extinction can dramatically alter diversity.

Complete case study on pages 6-7.

Lake Washington: An environmental success story.

Thinking Critically questions 1 and 2 page 7.