Canadian Geography 1202

Unit 1 Lesson 6 – The Geography of Life: Natural Systems

* Without nature’s system there is no life on \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (pg 54-56)
  + The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ regulates temperature on Earth
  + This makes water available to living things in liquid form
* **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** is a chemical substance that is essential to all known forms of life.
* It covers \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of Earth's surface.
* Most of us take water for granted.
  + Flush toilets, run sinks, water yards. Etc
  + Dripping faucets waste \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of water piped into our homes.
* Many drier areas of the world treat water as if it is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
* We need water to live
  + \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of our body is water
  + Crops and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ require water
  + Average Canadian uses \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ liters of water per day
  + Add production/manufacturing it is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ liters

***Average daily residential water use per capita (litres per person):***

* United States - 425L
* Canada - 326L
* Italy - 250L
* Sweden - 200L
* France - 150L
* Israel - 135L

***W a t e r P o l l u t i o n***

3 main types of water pollution:

* + \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Pollution
  + \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Pollution
  + \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Pollution

**Biological Pollution**

* Bacteria and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ that enter lakes and rivers.
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ from cities and towns are the largest source.
* Solved by reducing sewage from entering water \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (sewage treatment plants)

**Physical Pollution**

* Least harmful but most \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Floating garbage, paper, tin cans etc.
* These are easily seen and clean-up and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is relative simple.

**Chemical Pollution**

* Most \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Dumping of poisonous\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ chemicals into rivers and lakes
* Clean-Up - there are \_\_\_\_\_\_\_\_\_\_ problems
  + Not able to completely stop chemicals from reaching \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ supplies
  + Do not have the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ to clean-up chemicals once they are in the water.

**Decay Cycle**

* One animals waste is another Animal’s \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
  + Food Web
    - \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
    - Producers
    - Consumers
* There is no \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_in natural systems
* Creatures such as fungi and bacteria act as **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**:
  + They eat and recycle nature’s waste materials
    - As leaves fall to the ground, decomposers break them down and they \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
    - The remaining nutrients enrich the soil and help fallen seeds begin to grow (**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**) on the forest floor
    - This leads to the growth of more trees, which eventually leads to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ fallen leaves
    - The cycle continues…

**Characteristics of Natural Systems**

* They are driven by energy from the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Support all living things, including \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Are connected to one another in a complex \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of relationships
* Decompose and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ all wastes
* Can be affected by natural events and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ influences
* Are not well \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ by humans
* Operate on very long timelines, from hundreds to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of years
* Operate in all four of the earth’s \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Display \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Activity**

* + - Do questions #3 on pg 57
* Complete the following:
* Given a natural disaster such as
  + Earthquake, hurricane, flood or drought)
* Explain the immediate and long term consequences it would have on two natural systems in your area.