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.