Science 1206 Review
Ecology Unit

Terms to Know: (including any examples)

~~renewable resources~~
~~non-renewable resources~~
paradigms
sustainability
~~sustainable system~~
~~sustainable yield~~
paradigm shift
~~extirpated~~
~~threatened~~
~~endangered~~
ecology
ecosystem
biotic factors
abiotic factors
~~ecotone~~
decomposers
biodiversity
trophic level
autotrophs
heterotrophs
primary consumers
secondary consumers
tertiary consumers
producer
scavenger
herbivores
carnivores
omnivores
food chain
food web
pyramid of energy
~~pyramid of numbers~~
pyramid of biomass
ecological niche
habitat
interspecific competition
intraspecific competition
exotic species
pesticide
bioamplification
DDT
pesticide resistance
photosynthesis
cellular respiration
carbon reservoirs
peat
greenhouse effect
nitrogen-fixing bacteria
nitrifying bacteria
denitrifying bacteria
permafrost
climax community
primary succession
secondary succession
algal bloom
~~humus~~
fertilizers
~~nitric acids~~

Concepts to Know:

1. Sustainability of the fishery and forestry.
2. The value of resources: forestry, fishery, different species, etc..
3. The "Wolf" case study P. 21.
4. Understand how abiotic factors and biotic factors affect each other.
5. Compare the abiotic and biotic factors of a meadow with a park (p. 28-29).
6. Draw a food chain and label it.
7. Draw a pyramid of energy and explain who has the most energy and why (loss of energy at each trophic level = how?)
8. List four requirements necessary for a stable, self-sustaining ecosystem.
9. Discuss the frog case study and why scientists are concerned
10. Exotic species and the Zebra mussels from the Caspian Sea
11. Be able to describe the niche of any given organism.
12. Differentiate between interspecific and intraspecific competition and describe the effects on populations.
13. Know about pesticides and the problems with using them (p. 52-56).
14. Using an example, explain how DDT has affected animal populations.
15. Differentiate between DDT and modern chemical pesticides.
16. Explain the carbon cycle.
17. How is the carbon cycle related to the oxygen cycle?
18. Describe the impact of humans on the carbon cycle.
19. The effect of fertilizers on aquatic ecosystems.
20. How nitrogen is changed into nitrates.
21. Identify global issues pertaining to the environment.
22. Know the causes, effects and solutions to the Greenhouse Effect.
23. Describe 4 of the Canadian biomes (abiotic and biotic factors)
24. Differentiate between primary and secondary succession.
25. ~~Differentiate between the different layers in soil.~~