

Science 1206
Ecology Unit
 TEST 1 STUDY GUIDE



1. Know the following terms:

Paradigm	Paradigm shift	Sustainability
Deforestation	Gaia hypothesis	Biosphere
Ecology	Ecosystem	Environment
Micro-ecosystem	Biotic factors	Abiotic Factors
Organism	Species	Population
Community	Symbiosis	Parasite
Host	Predation	Predator
Prey	Food Chain	Trophic Level
Autotroph	Heterotroph	Producer
Consumer	Decomposer	Saprobe
Detritus	Herbivore	Carnivore
Omnivore	Scavenger	Food Web
Ecological Niche	Habitat	Biodiversity
Competition	Extinct	Extirpated

2. Be able to explain sustainability in relation to a natural resource industry (e.g., forestry, fishery, agriculture, aquaculture, mining, tourism or others)

3. Provide examples of abiotic and biotic factors.

4. Explain how biotic and abiotic factors affect ecological interactions

5. Know and identify the different symbiotic relationships:

Mutualism

Commensalism

Parasitism

6. Be able to create and label a food chain

Producer → Primary Consumer → Secondary Consumer → Tertiary Consumer

7. Know what flows through a food chain:

Energy (10%)

Nutrients

Pesticides

8. Know the Competitive Exclusion Principle

9. Be able to classify organisms as producer, consumer, autotroph, heterotroph, decomposer, herbivore, carnivore, omnivore, saprobe

10. Be able to define competition and explain how competition arises among organisms

1) Intraspecific Competition

2) Interspecific Competition

11. Be able to state the ecological niche of a particular species

12. Explain how biodiversity of an ecosystem contributes to its sustainability

13. Know the different types of graphs called pyramids are often used to represent food chains.

Pyramid Energy

Pyramid of Biomass

Pyramid of Numbers

14. Be able to examine the flow of energy in ecosystems using the concept of the pyramid of energy
16. Compare photosynthesis and Cellular Respiration
17. Explain the steps in Ecological Succession
18. Distinguish between primary succession and secondary succession

PAGE	QUESTIONS
Page 13	#1, #2, #3
Page 23	#1 , #2, #3, #4, #4, #5, #6,
Page 29	#1, #2, #3, #4
Page 32-33	#1, #2, #3, #4, #5
Page 39	#1 , #2, #3, #4, #4, #5, #6, #7, #8, #9, #10, #11, #12, #13, #14
See handout on Succession	