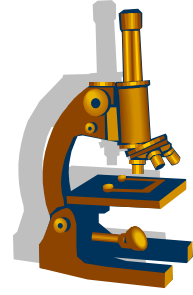


Student Study Guide - Honors Biology

Ecology - Chapter 18

For your test you should be able to demonstrate your understanding of the following items:



- Explain the details of three different types of adaptations
- Define population and population ecology
- What is meant by the term population density, how is it measured, and what units are used (mark-recapture method)?
- Be able to calculate the density of a population using the mark-recapture method.
- Compare the three main types of dispersion and give an example of each one.
- Using graph paper create two graphs, each on representing the two main growth models. Make sure you can label the title, the subtitles, the units, and label specific parts in each one with a short description of what it represents.
- Distinguish between density factors present when measuring population growth.
- Explain the population cycle of a species presented in a graph.
- Compare the Age structure of the three nations Kenya, United States, and Italy.
- Create a survivorship curve, label the level of each one, and explain what is happening with each curve.

Review all handout materials, class notes and chapter 3 of your text book

And

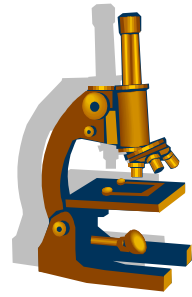
STUDY!

STUDY!

STUDY!

Student Study Guide - Honors Biology

Ecology - Chapter 19



For your test you should be able to demonstrate your understanding of the following items:

- Explain the two component of the diversity of a community.
- Describe the four key properties of a community
- What is meant by the term interspecific interactions and give the details of the three main types: competition, predation, and symbiosis.
- Differentiate between ecological niche and resource partitioning.
- Explain and give an example of predator adaptations
- What are some plant defenses against herbivores and animal defenses against predators?
- Distinguish between Batesian mimicry and Mullerian mimicry.
- Differentiate between parasitism and mutualism, giving examples of each.
- Be able to state each trophic level, give an example of an organism at each level and the criteria that distinguish each level from the next.
- Read a food web and identify the level of organism at any level within the web (the arrow chart)
- Explain each component or an energy pyramid in complete detail (essay).
- Explain the details of the coevolution that occurs between *Passiflora* vines and *Heliconius*.
- Be able to explain the carbon, nitrogen, phosphorus, and water cycles.

Review all handout materials, class notes and your text book

And

STUDY!

STUDY!

STUDY!