

Biology II/Unit 10 Study Guide

bio2u10sg Entomology

Unit Task Description: in this unit on Entomology you will be applying your knowledge from the year as well as your investigative skill to learn about and present information about insects generally and honey bees specifically to your class mates. Each investigative team will develop research questions around one of the topics below. The purpose of this unit is to apply what you know to the study of one of the most abundant and important groups of animals on the planet, the insects. The model insect in focus will be the honey bee, one of the most important insects to humankind.

Learning Objectives (to ask questions, answer those questions and learn from those questions about the following aspects of insects generally or honey bees specifically)

1. Taxonomy (Domain to Species)
2. Evolution (cladistics/origins/adaptations)
3. Genes (role of genes)
4. Ethology (learned/innate/communication)
5. Heredity (reproduction)
6. Physiology (homeostasis of individual bees vs hive)
7. Biochemistry (honey/pollen/propolis/venom/pheromones/royal jelly)
8. Ecology (interactions: food web /niche/symbiosis)

Vocabulary - what words/concepts get in the way of your understanding?

Task Sequence:

1. Form research teams around the 8 areas of investigation above
2. Brainstorm a master list of questions related to the chosen topic (use web or text for help)
3. Reduce the question list down to one investigatable question per team member
4. Research their question and assist others (each question requires an answer that includes text and a chart, graph, or image)
5. Record resources that help them in their research and record in APA style
6. Review each other's research
7. Create information in presentable form creatively displayed on poster board
8. Brainstorm questions that can test what audience should learn from your topic
9. Reduce questions down to the 5 questions that best represent what audience should learn about your topic

Team **Poster** 10pts

Entomology **Quiz1** (from objectives 1-4) 10pts

Entomology **Quiz2** (from objectives 5-8) 10pts

Entomology **Exam** 20pts