

ENTOMOLOGY PROJECT

Assignment # 1: Insect Collection - 30 Points (Due date: September 25)

Collect, neatly mount, and properly identify six different insects. Each of the six insects must be from a different order. In order to identify your insects correctly, you will need the following information on a small note card pinned under the insect:

- a. The common name of the insect.
- b. The order to which the insect belongs.
- c. When (the date), and where (the place) you collected the insect.
- d. Your initials.

*** Note: Assignments # 2 through # 8 will be compiled neatly into a well organized entomology portfolio. The portfolio will be due on November 6.**

Assignment # 2: Class Notes

Type and include in your entomology portfolio, your class notes, plus your extensions for each, on the following topics:

- Characteristics of Insects
- Insect Metamorphosis
- The Variety of Insect Wings
- The Structure and Function of Insect Mouthparts
- Insects And Pollination
- Insect Defense
- Insect Communication
- Biological Control of Insect Pests
- Insects For Dinner

Assignment # 3: Insects in the News, Current Event

Choose an article from a local newspaper or science magazine / web site about an insect that is both easy for you to understand and one that interests you. You will summarize the article using the sheet the “Weekly Entomology News” and you will share the summary of your article with the class. Include a word processed copy of the summary in this portfolio.

Assignment # 4: Behavioral Study

Observe any single insect in the wild or in captivity for at least 10 minutes and objectively describe its behavior. Include the following in your observations:

- Everything the insect is doing during the observation
- Any noticeable, curious behaviors you see.
- How does it sense its environment?
- How does it respond to various stimuli (sound, light, water)?

Assignment # 5: Detailed Sketch of an Entire Insect

Using a plain white sheet of paper and a soft pencil, make a detailed, enlarged drawing of a single insect from your collection. Title the page with the order to which the insect belongs and its common name.

Label the following body parts:

- Head, Thorax, and Abdomen
- Antennae

Assignment # 6: Detailed Sketches of Insect Parts

Using white paper, a soft pencil, and a hand lens or dissecting microscope, make detailed, enlarged drawings of the insect parts listed below. Title each sketch with the Order and common name of the insect from which the part was taken.

Use a separate piece of paper for each category listed below:

- a. 1 pair of antennae
- b. 1 pair of compound eyes
- c. 1 pair of wings
- d. 3 Legs from one side of a single insect

Assignment # 7: Natural History Report

Choose one insect from your collection and write a well developed one page report on the insect. Use your own words! The paragraph should discuss the following topics:

- Feeding behavior, diet, & habitat (Where they can be found)
- Reproductive behavior and life cycle (Type of metamorphosis?)
- How might it communicate or defend itself?
- How they might benefit or harm human populations?

Assignment #8: 3-D Model of an Insect

Build a 3 dimensional model of any insect from your collection. It must be at least 30cm in length, but no longer than 60cm. It must be light enough to hang from the ceiling. You must attach a card that identifies the order and common name of the insect as well as your name. All anatomical features including color, legs, wings, antennae, and mouthparts must be accurate.

Assignment # 9: Title Page and Table of Contents

Use a piece of white plain paper to design your title page. You will title this project:

Entomology Portfolio. This title, as well as your name and the date, must appear somewhere on your title page. Your title page must also include one of the following: a sketch or a picture of an insect, a poem about an insect, or any design related to entomology that you wish to have.

Your table of contents should be the next page after the title page. It should include a list of the contents of the portfolio in order, as well as the page number of each section you list. All pages in your portfolio should be numbered, starting with the page after the table of contents.

Entomology Portfolio Scoring Guide

<u>Topic</u>	<u>Points Possible</u>	<u>Your Score</u>
Title Page	5	
Table of Contents	5	
Class Notes on Insects plus Extensions		
- Characteristics of Insects	5	
- Insect Metamorphosis (Ext)	10	
- The Variety of Insect Wings	5	
- Insect Mouthparts	5	
- Insects and Pollination	5	
- Insect Defense (Ext)	10	
- Insect Communication (Ext)	10	
- Biological Control of Insect Pests	5	
- Insects for Dinner (Recipe)	10	
Insects in the News	10	
Behavioral Study	10	
Illustrations		
- Complete Insect	15	
- Antennae	10	
- Eyes	10	
- Wings	10	
- Legs	10	
Natural History Report	10	
3-D Model of Insect	20	
Use of Class Time	20	
Total Points Possible	200	

Points Earned _____

% Earned _____

Portfolio Grade _____

