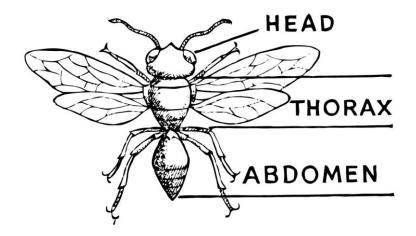
# **Insect Collection Project**

# Overview:

The end product of this collection project will be a shadowbox display or photos of 12 insects and a notebook with insect drawings and diagrams. An insect is an arthropod with three body segments and three pairs of legs.



### Planning your project:

This project is due by the end of next winter, so get an early start on your project! It will be very difficult to find insects when the cold temperatures arrive. Ideally, try to collect all your insects by Fall Break, and you will have the remainder of the year to focus on identifying and finalizing your presentation. You will be given some science class time to work on this project but it is primarily an <u>at home project</u>.

#### What **not** to collect:

- Do not collect Walking Sticks or Praying Mantises as they are protected.
- Spiders, ticks, scorpions, millipedes, centipedes and pill bugs are not insects.

## Subduing your insects:

- 1. The easiest way to subdue your insects is to put them in a zip lock bag or Tupperware container and place them in the freezer for a couple of hours. You can also them in the freezer for several months in a row prior to putting the insects in your collection. When you defrost the insects be sure that they dry out well so that they do not mold.
- 2. If you put a butterfly or moth in the freezer you will want to take them out after they are dead and open the wings so that they lie flat. If you wait too long it will be difficult to get the wings to unfold.
- 3. If you use the freezer method for cockroaches they can be frozen for several weeks and <u>still</u> <u>be alive.</u> Make sure you leave them in the freezer for a couple of months.
- Insects can also be killed by putting them in a jar with a cloth or cotton ball soaked in nail
  polish remover. HAVE A PARENT HELP YOU WITH THE NAIL POLISH REMOVER
  BECAUSE IT IS POISONOUS.

Tips for taking good close-ups with your smartphone https://iphonephotographyschool.com/focus-tips/

Due Date: March 2021

# Short list of notebook components.

Reminder: All drawings and diagrams must be in color (no crayons), drawn on white cardstock and labeled using black ink or typed labels.

- 1. Life cycle: Draw and briefly explain in words the life cycle of one of your insects.
- 2. Drawing showing the External anatomy of an insect with the following labels: head, thorax, abdomen, compound eyes, simple eyes, antennae, spiracles, wings. Give the function of the spiracles at the bottom of the page.
- 3. Drawing showing the Internal Anatomy of an insect with the following parts labeled: esophagus, crop, stomach, intestines, heart, nerve cord, and Malpighian tubules. Give the function of the crop and Malpighian tubules at the bottom of the page.
- 4. DRAW and EXPLAIN a picture showing one of the following types of relationships between an insect and another organism (commensalism, mutualism or parasitism). Do not use a prey predator relationship Do not use a flowering plant and a bee or butterfly as your example. Too easy ©
- 5. Classification of one of your insects. Give its Kingdom, Phylum, Class, Order, Family, Genus and Species. (You may find other taxa used such as divisions and supra order. Include these in your taxonomy if they are used).
- 6. For 8<sup>th</sup> grade only: Type a one page, single space essay explaining five reasons why insects have been so successful. Use 12 point Arial font, one inch margins.

Complete project instructions will be provided by email upon request, or at beginning of the school year.