

01

RULES SHEET

02

DIFFICULT TOPICS

03

COMMON QUESTIONS

04

TIPS FROM A VETERAN



OTHER FREE RESOURCES

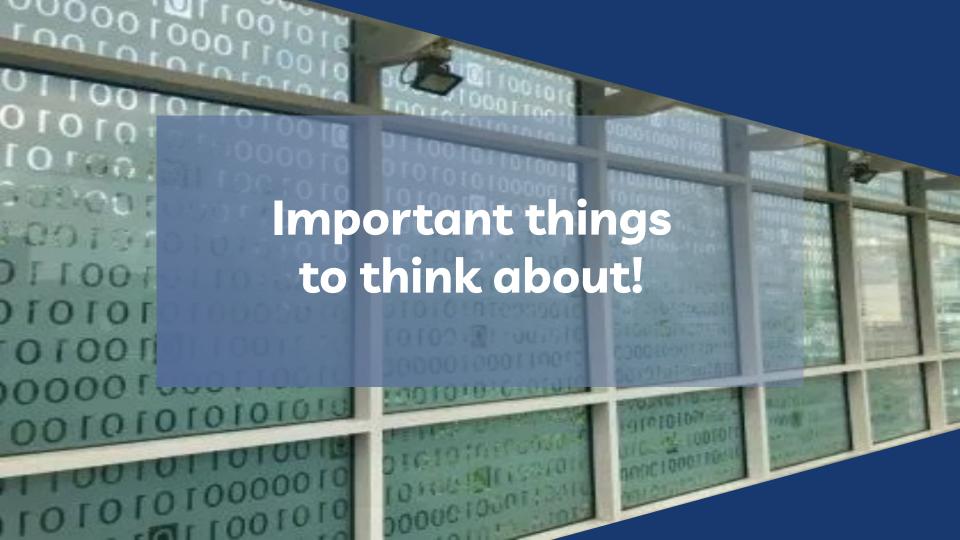




The Rules Sheet

- 2" 3-ring binder, Field Guide, magnifying glass
- Memorize appearances, key features, Class, Order, Family, Common Name
- Very knowledge/rote memorization based!





Topic 1: Organizing a Binder!

- Figuring out what kind of format works for you!
 - Images + Info
 - Just Images
 - Just Info
- Charts are your best friend
 - Anatomy diagrams
 - Body part adaptations
 - Morphogenesis

Topic 2: Human Impact

- Important to build intuition for how insects relate to human life
- Positive: food, pollination, control populations of harmful insects
- Negative: vectors for disease, damage crops and buildings



All of the following questions have been pulled from past YJI exams (which can be found on our website) or the Text Exchange on SciOly Wiki

Question 1: ID



- Identify the order, family, and common name of the specimen.
- 2. In what kind of environment is this family of insect usually found?

Question 1: ID



- Order Orthoptera,
 Family Tetrigidae, Pygmy
 Grasshopper
 (awl-shaped pygmy
 grasshopper)
- 2. Most reside in rainforests! But this particular species is found in moist grasslands near streams, riverbanks and mudflats.

Question 2: Dichotomous Key

Make a Dichotomous Key for these 5 Insects:











Question 2: Dichotomous Key

Make a Dichotomous Key for These 5 Insects (always one step less than # of specimens)!

- a. Concealed mouthparts \rightarrow 2
- b. Exposed mouthparts \rightarrow 3

2

- a. Have multi-segmented antennae \rightarrow Diplurans
- b. No antennae \rightarrow Proturans

3.

- a. Large, well developed back legs \rightarrow 4
- b. Smaller back legs →Blattodea (cockroach)

4

- a. Long antennae →Tettigoniidae (katydids)
- b. Short antennae → Acrididae (short-horned)



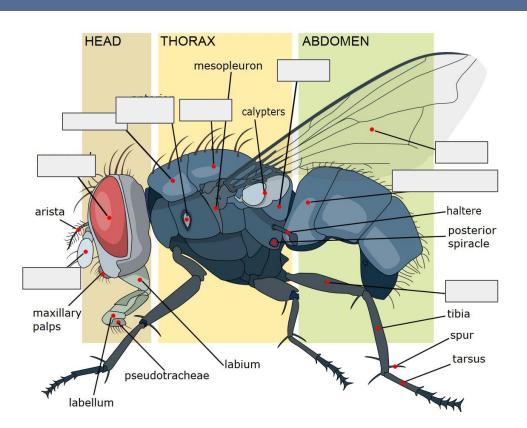








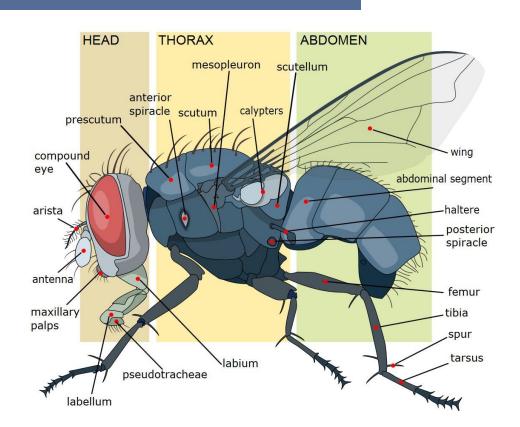
Question 3: Label!



Word Bank:

- Compound Eye
- Antenna
- Prescutum
- Scutum
- Scutellum
- Wing
- Abdominal Segment
- Femur

Question 3: Label!



Tips from a Veteran

- Assemble a rudimentary binder ASAP so that you can spend the rest of the year adding to it and memorizing key information!
- Make a Quizlet multiple images of each specimen so you can get used to looking at different angles for different things.
- Practice tests! You unfortunately don't have many of these, so I would use other people's Quizlets or test each other with the field guide.
 - Speed IDing is key!

Resources

Entomology ID List

Practice Test 1
Practice Test 2
Practice Test 3

Wiki!!

Field Guide

THANKS!

