

Below are the minimum requirements for recording zoological observations in your lab book. Please be opportunistic and include as many additional observations as you wish. Lab books will be examined before week four for a preliminary review. Please remember that all lab books must be turned in complete before taking the final laboratory practical examination on June 1st.

Keeping the lab note book

The first 2-3 pages of your lab book should be the table of contents that lists the scientific names of all the observed organisms. Every page should have the scientific name of the organism, its taxonomic affiliations, date and other collection information at the top of the page. Use the entire page for each drawing. Don't make teeny-tiny, itty-bitty drawings. Draw what you see. Clean, simple lines are best for your drawings. Be sure to show the relationships between morphological features clearly. You must label all the anatomical structures and include scale bars in mm. Record your observations in pencil. It is best to finish one drawing before going on to the next. That is, label all the anatomy, put in scale bars, etc. while the organism is in front of you. **Do not wait to finish up the labeling at a later date.** Use coloured pencils for drawing if appropriate. Also, record your observations of interesting behaviour or ecological relationships. A list of organisms that we will likely see will be handed out in class. These animals and others should be known by you before the end of the program.

Required observations for your lab book ❖**Lower Division**❖

Four gross morphological observations and one dissection from each of the following general groups: Echinodermata, Annelida, Crustacea, Mollusca, Cnidaria

Two dissections of your choice

One gross morphological observation from the each of following groups: Porifera, Nudibranchia, Nemertea, Bryozoa, Copepoda, Chelicerata, Urochordata, Trematoda, Cestoda, Ctenophora, Cnidaria, Nematoda, Cephalochordata

Gross observations from at least 8 of the following groups: Chaetognatha, Kinorhyncha, Rotifera, Sipuncula, Tardigrada, Priapulida, Sarcomastigophora, Ciliophora, Onychophora, Hexapoda, Ostracoda, Phoronida, Isopoda, Amphipoda

At least one detailed observation of each of the following: spicules, nematocysts, feeding structures, gills, setae, whole body cross sections, larvae, egg masses

One example of at least six of the following: tide pools, intertidal zonation of pilings, symbiosis, parasitism, carnivoury, herbivoury, crypsis, locomotion, fossils, mating, effects of pollution, bioluminescence, wave stress adaptation, homing behaviour

Summary of the **minimum** number of observations to be recorded in the lab notebook

❖**Lower Division**❖

7 dissections

41 Gross morphological observations

8 Fine morphological observations

6 Ecological &/or Ethological observations

Note: No, you may not use one figure towards two of the requirements. Yes, you do get brownie points for neatness and extra observations (= dedication to your work) beyond those required.

Required observations for your lab book ♣Upper Division♣

Two gross morphological observations from each of the following groups and one dissection from each of the starred (*) groups: Hydrozoa, Anthozoa*, Holothuroidea, Echinoidea*, Asteroidea*, Polychaeta*, Brachyura*, Anomura, Caridea*, Cirripeda*, Bivalvia*, Cephalopoda*, Porifera*, Gastropoda*, Amphipoda, Chelicerata, Bryozoa, Nemertea, Urochordata, Trematoda

One gross observation from each of the following groups: Scyphozoa, Copepoda, Ostracoda, Sarcomastigophora, Ciliophora, Nematoda, Oligochaeta, Hirudinea, Ctenophora, Cestoda, Cephalochordata, Chaetognatha, Ophiuroidea

Gross observations from at least five of the following groups: Kinoryncha, Radiolaria, Rotifera, Sipuncula, Tardigrada, Priapulida, Insecta, Hemichordata, Phoronida, Brachiopoda, Onychophora

At least two different detailed observations of each of the following: spicules, nematocysts, feeding structures, gills, setae, whole body cross sections, larvae, egg masses

One example of at least six of the following: tide pools, intertidal zonation of pilings, symbiosis, parasitism, carnivory, herbivory, crypsis, fossils, locomotion, mating, effects of pollution, bioluminescence, wave stress adaptation, homing behaviour

Summary of the **minimum** number of observations to be recorded in the lab notebook

♣Upper Division♣

11 dissections

58 Gross morphological observations

24 Fine morphological observations

6 Ecological &/or Ethological observations

Note: No, you may not use one figure towards two of the requirements. Yes, you do get brownie points for neatness and extra observations (= dedication to your work) beyond those required.