

Zoology Unit 1 Study Guide

1. What is zoology?

Study of animals

2. What are characteristics of all animals?

1. multicellular, Eu
2. Heterotroph
3. cells w/out walls
- 4 movement
- 5 reproduce sexually
- 6 require oxygen

3. Explain the function of the following dissection tools. (Be able to identify in a picture)

- a. Tray - Contains organism
- b. Scalpel - Slice organism
- c. Probe - point to specific parts
- d. Scissors - most used! cutting organism
- e. Pins - holding in place
- f. Forceps - moving parts or helping when cutting

4. Explain proper lab attire.

close toed shoes; hair back, non bulky clothing, Goggles, gloves

5. How do we classify organisms?

Binomial nomenclature
amount of relatedness

6. List the order of classification from largest to smallest. Understand each step.

Kingdom → Phylum → Class → Order → Family → Genus → Species

7. How do we name organisms? How is this different than the common name? Explain how we write the scientific name. Binomial nomenclature, in latin more universal.

capital → Felis concolor ← all italicized!

8. Explain the different disciplines of zoology discussed.

ichthy → fish

Ornith → birds

ento → insects

herpet → reptiles + amphibians

mamm → mammals

malac → mollusks

arachn → spiders

Protozo → one-celled animals

Parasi → parasites

9. Explain the cell theory.

1. All living things made of cells
2. Basic unit is cell
3. all cells come from cells

10. Explain examples of each of the animal phyla discussed in class.

- simple → Porifera - Sponges
- stinging cells → Cnidaria - coral, jellies, anemones
- flat worms → Platyhelminthes - flatworms, planaria, fluke, tapeworm
- round worms → Nematoda - Hookworms + Heartworms
- segment ~~round worms~~ → Annelida - leech + earthworms
- chitin exoskeleton → Arthropoda - shrimp, lobster, barnacle, insects
- soft bodies → Mollusca - snail, scallop, slugs, squid
- spines → Echinodermata - sea urchins, sea star, brittle star
- nerve cord → Chordata - lancelets, fishes, reptiles, birds, amphibians, mammals

11. Define the following directional terms -

- a. Distal - further away from trunk
- b. Proximal - closer to trunk
- c. Posterior - Back
- d. Medial - middle
- e. Anterior - Front