Name _____

Zoology 1st Quarter Review

_____ 1. What are the kingdoms of classification? _____

K. Monera (eubacteria + Archaebacteria) K. Protista, K. Plantae, K. Fungi, K. Animalia

_____ 2. What is zoology? _____

the scientific study of the behavior, structure, physiology, classification, and distribution of animals.

_____ 3. What is the difference between basic and applied zoology? _____

Applied zoology is when the study of animals is used some how to benefit humans.

_____ 4. What characteristics do all animals share? _____

heterotrophic multicellular organism

_____ 5. What are some invertebrate examples? _____

porifera (sponge), platyhelminthe (flat worm)

_____ 6. What do all invertebrates have in common? _____

animals without backbones 97% of all animal species

_____ 7. What are some chordate examples? _____

Hagfish (jawless fish), Snake, shark, human

_____ 8. What do all chordates have in common? _____

All chordates have a notochord, nerve cord, pharyngeal slits, & post anal tail.

_____ 9. What separates vertebrates from chordates? _____

Vertebrates have a vertebral backbone that protects the nerve cord

_____ 10. What are some chordate examples? _____

Vertebrate

reptiles, amphibians, fish (bony) Mammals

_____ 11. Why aren't bacteria and protozoa animals? _____

Bacteria + protozoa both are classified in their own kingdoms, they are unicellular organisms

_____ 12. What is the difference between a marine and freshwater ecosystem? _____

Salinity ↑ less than 1%

Saline

13. How can you use animals to determine the health of an ecosystem?

calculate biodiversity + collect to see if "sensitive" macroiverts are present

14. What chemical and physical properties go in to making a healthy ecosystem?

→ DO
→ PH
→ temp
→ turbidity

15. Use the following to complete the chart. You may use a term more than once.

Word bank
You may use these terms many!

Abdomen
Anemone
Arachnid
Asymmetry
Bacteria
Beetle
Bilateral symmetry
Cephalization
Clam
Closed circulatory system
Complete gut
Coral
Crustacean
Diploblastic
Endoskeleton

Exoskeleton
Eye spots
Flatworm
Gemmule
Hagfish
Head
Human
Insect
Jawless fish
Jellyfish
Multicellular
Nematocyst
Nematocyst
Nerve net
Open circulatory system

Osculum
Ostia
Perch
Produces slime
Protozoa
Radial symmetry
Scales
Sea star
Sponge
Tentacles
Thorax
Tissues
Unicellular
Veins and arteries
Zooanathallae

	Animal Examples	Group Characteristics
Kingdom monera	Bacteria (not an Animal)	Unicellular, having a cell membrane + genetic material (prokaryotic cell)
Kingdom Protista	Euglena Amoeba (not an animal)	Unicellular, having organelles (eukaryotic cell)
Phylum porifera	Sponge (multicellular but no true tissues)	Asymmetry osculum → ostia → no nervous system — Gemmules → Spicules → $\times$ Skeleton of sponge — Collar Cells →
Phylum cnidarian	Jellyfish Hydra Coral Anemone	Radial Symmetry nerve net Body plan creates drag that draws in nutrients (Medusa v. Polyp)
Phylum Platyhelminthes	Flatworm Planarian	bilateral Symmetry Cephalization Eye spots No true gut / complete gut absent (diffusion of nutrients & waste) Pseudocoelomate
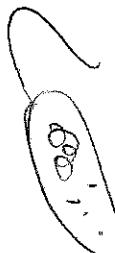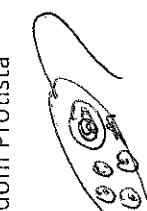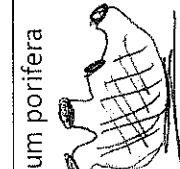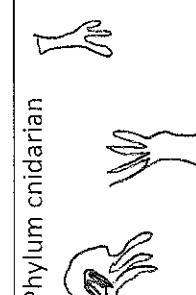
porifera man o war

Know what all look like → Be able to identify animal by name + Structure

	Animal Examples	Group Characteristics
Phylum arthropoda	Insects, Spiders, Macroinvertebrates, Beetles	bilateral symmetry, — Head/thorax/abdomen, — tripod movement, — Exoskeleton - protects but limits features constrains growth
Phylum mollusca	Clams, Mussels, Squid, Octopus	— closed circulatory system, — shell, — Giant Squid
Phylum chordata	Jawless Fish = Hagfish - Produces Slime, Lamprey, all vertebrates	
Subphylum vertebrata	Mammals →, Birds →, Reptiles →, Amphibians →, Bony fish →	hair, milk, live birth; scales, wings, lay eggs; scales, lay eggs; live on land + in water; ex, perch; scales/gills

(top annotations: circulatory/digestive system, — Brain, mouth, (nothing))

have a nerve cord

✱ Be able to use a cladogram + dichotomous key

✱ Give examples of Symbiotic relationships among animals or animals/plant

✱ Ocean + Freshwater zones

✱ coelom vs. pseudocoelom