Biology 1 Name:

***Animal Kingdom Gallery Walk*** Date:

***Vertebrates***  Hour:

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| --- | --- | --- | --- |
| Phylum (Class/Order) | Examples | Major Niche (Where the live/What they eat) | Major Phylum Characteristics (Answers to Station Questions) |
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***Station 1: Agnatha (p.783-784)***

* How do Agnatha differ from other fish? (list 3 differences)
* What type of fertilization do they exhibit?
* What symbiotic relationship do many members of this phylum employ? (mutualism, commensalism or parasitism)

***Station 2: Chondricthyes (p.784-786)***

* What type of material composes the skeleton of organisms in this class?
* Describe the skin of members of this class. What advantages does it offer?
* How do these fish maintain their position in the water?
* What type of fertilization do most members of this class exhibit?

***Station 3: Osteichthyes (p.787-792)***

* What type of material composes the skeleton of organisms in this class?
* What are the two main groups of bony fish?
* What type of fertilization do most members of this class exhibit?
* Fish exhibit a “single-looped” circulatory system. How many chambers are found in a fish heart?
* Trace the path of blood flow in the fish. (where does the blood go?)
* What is a swim bladder?

***Station 4: Amphibia Order: Anura (p.799-803)***

* What does amphibian mean? How does this describe the life cycle of amphibians? (p.811)
* Given the stages of the amphibian life cycle, describe the different methods of breathing.
* How are members of the order Anura different from Caudata or Gymnophiona?
* What type of fish likely share the most recent common ancestor with amphibians?

***Station 5: Amphibia Order: Caudata and/or Gymnophiona (p.799-803)***

* Describe amphibian skin. Is it water-tight? What does this say about their niche?
* Describe the circulatory system of an amphibian. How many “loops” are there and how many chambers are in the heart?
* Are amphibians ectothermic or endothermic? Why? (p.828)
* What is a cloaca?

***Station 6: Reptilia (p.829-834)***

* What egg adaptations allow reptiles to reproduce on land? (p.823)
* What is the difference between oviparity and viviparity?
* Describe the difference between the three major groups of reptiles (Chelonia, Crocodilia & Squamata).

***Station 7: Reptilia (p.829-834)***

* Describe reptile skin. Is it water-tight? What does this say about their niche?
* Describe the circulatory system of reptiles. How many “loops” and how many chambers in their heart?
* Are reptiles ectothermic or endothermic? Why? (p.828)

***Station 8: Aves (p.841-842)***

* How does a bird skeleton relate to its movement?
* What mouthpart is unique to birds?
* According to the cladogram on p.842, what modern living group of animals is the closest relative of birds?

***Station 9: Aves (p.841-842)***

* Describe bird skin. Is it water-tight? What does this say about their niche?
* Describe the circulatory system of birds. How many “loops” and how many chambers in their heart?
* Are birds ectothermic or endothermic? Why? (p.828)

***Station 10: Mammals (867-871)***

* What are the defining characteristics of mammals? Where does the term “mammal” originate?
* How is the order Chiroptera different from the other orders of mammals?
* What is the difference between monotremes, marsupials and placental mammals? Give one example of each

***Station 11: Mammals (867-871)***

* Describe mammal skin. Is it water-tight? What does this say about their niche?
* Describe the circulatory system of mammals. How many “loops” and how many chambers in their heart?
* Are mammals ectothermic or endothermic? Why? (p.828)

***Station 12: Rest***

Catch up and complete any work for stations that you ran out of time for.