Living Fossils: Fish and Reptiles

BEATY BIODIVERSITY MUSEUM

Scavenger hunt

Search through the Fossil, Fish, Marine Invertebrate, and the Cowan Tetrapod Collections to learn about animals and their ancestors that existed during the time of the dinosaurs!

1) _____ was one of the first reptiles to go back to living in the water where its amphibian ancestors had once lived. Like the modern crocodile, it had nostrils at the top of its jaws and needed to keep its head at the water's surface to breathe.

2) Megalodons (*Carcharodon megalodon*), the biggest sharks that ever lived, roamed the oceans 17 million years ago. Which two living sharks may be related to megalodon? _____, _____

3) There are over 400 species of sharks. Scientists date the ancestry of fossil shark teeth back over _____ million years.

4) Draw the bonnethead shark (*Sphyrna tiburo*).

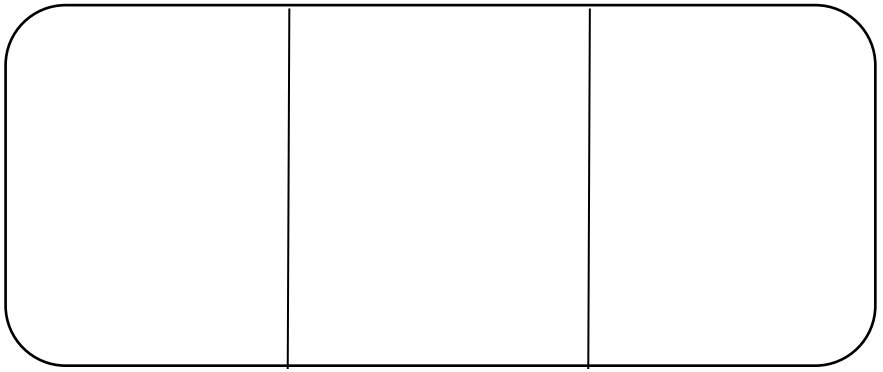
5) Sharks are in the class Chondrichthyes, or cartilaginous fishes, meaning their skeletons are made of cartilage rather than bone. Although Chondrichthyes are among the oldest living vertebrates, intact shark fossils are rare because

_____

_____

_____

6) Draw three of the different types of shark jaws. How many rows of teeth can you count?



7) Most amphibians spawn masses of soft eggs in water and many young amphibians have _____ and_____ until they mature.

8) Compare the alligator (*alligatoridae)* egg with the northwestern salamander (*Ambystoma gracile*) eggs. What differences do you notice between them?

_____

_____

9) Under which category does the hawksbill turtle (*Eretmocheleys imbricata*) fall on the IUCN Red list? _____

10) The lobed fins of coelacanths (*Coelacanth whiteia*) resemble the early adaptations that allowed our fishy ancestors to eventually evolve legs. And the 375 million-year-old fossil fish _____ had wrist bones and even finger-like structures.