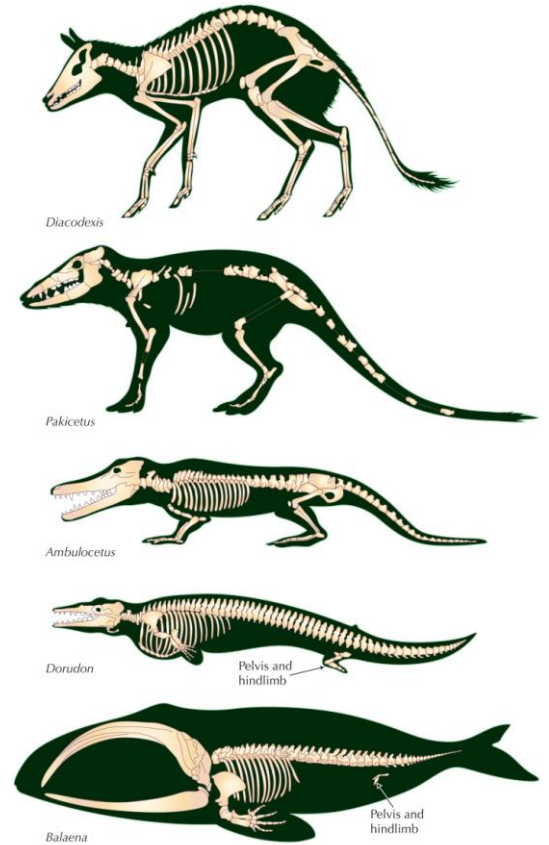


Round: 11B

1. Below are a series of fossils ranging from 50 million years ago to the present that depict how some mammals transitioned to life in the sea. During development, modern whale fetuses display characteristics that strongly echo this terrestrial origin. Describe three (3) of these characteristics. (6 pts)



2. Name five (5) external physical characteristics of modern cetaceans that make them well-suited to life in an aquatic medium. (10 pts)
3. What highly modified bony features of whales are BEST used to construct a phylogenetic tree? (2 pts)
4. Explain the condition of pachyosteosclerosis as it applies to the structure and function in marine mammals. (2 pts)