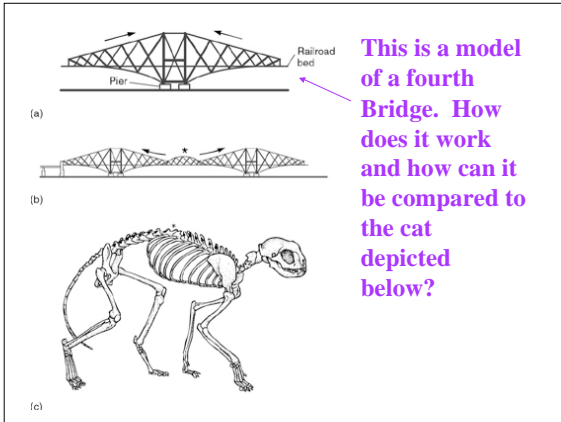
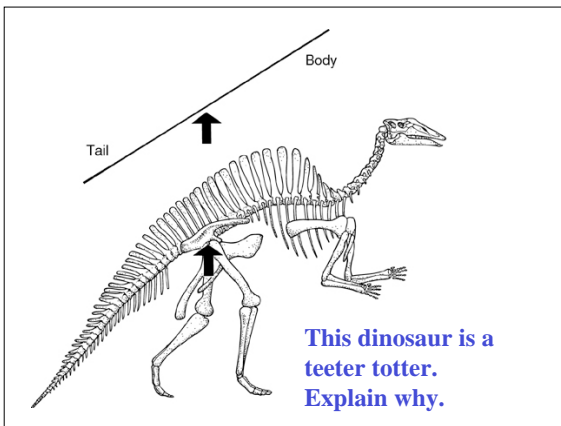


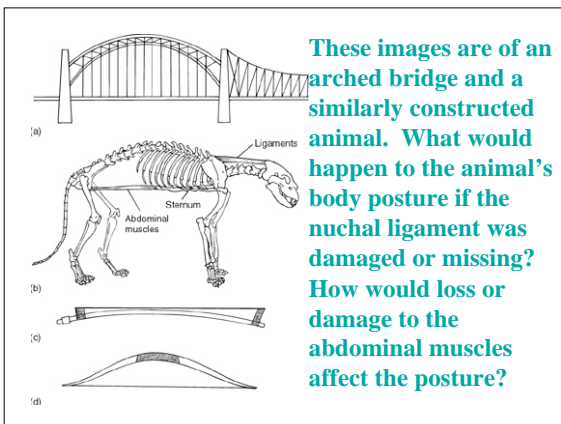
- Using the previous slide, explain how body support differs between an aquatic animal and one that lives on land.
- How do the roles of tails and long necks and heavy heads of different terrestrial animals affect their ability to balance on their vertebral columns?
- How is this ability affected if the animals stand bipedally instead of remaining quadrupedal?
- Use the previous and next several slides to answer these questions.



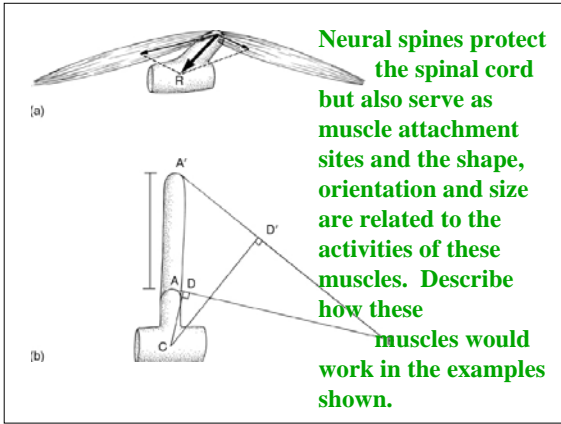
This is a model of a fourth Bridge. How does it work and how can it be compared to the cat depicted below?

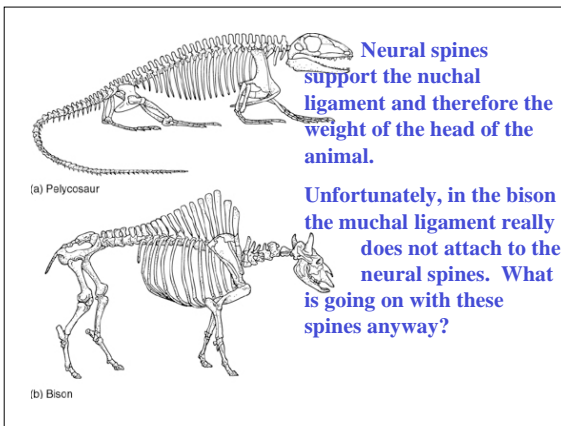


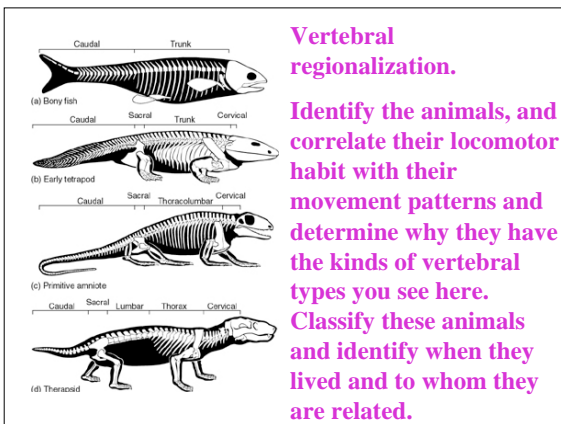
This dinosaur is a teeter totter. Explain why.

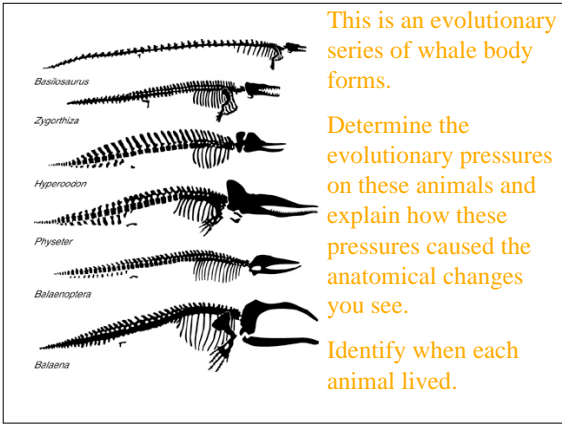


These images are of an arched bridge and a similarly constructed animal. What would happen to the animal's body posture if the nuchal ligament was damaged or missing? How would loss or damage to the abdominal muscles affect the posture?





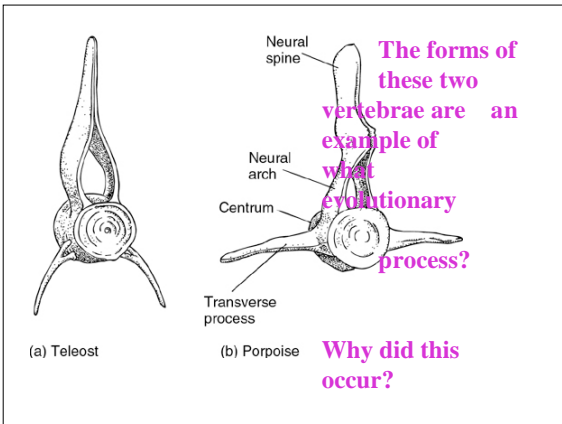




This is an evolutionary series of whale body forms.

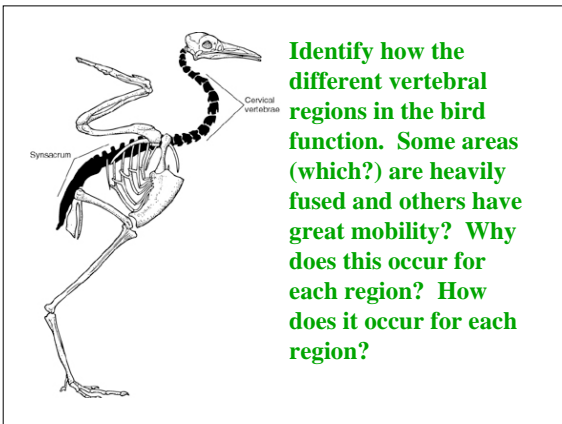
Determine the evolutionary pressures on these animals and explain how these pressures caused the anatomical changes you see.

Identify when each animal lived.

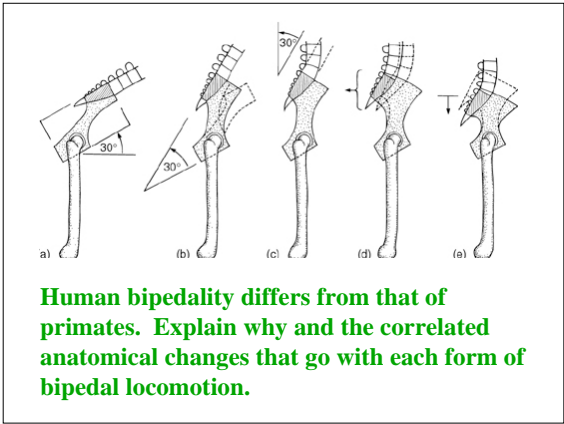


The forms of these two vertebrae are an example of what evolutionary process?

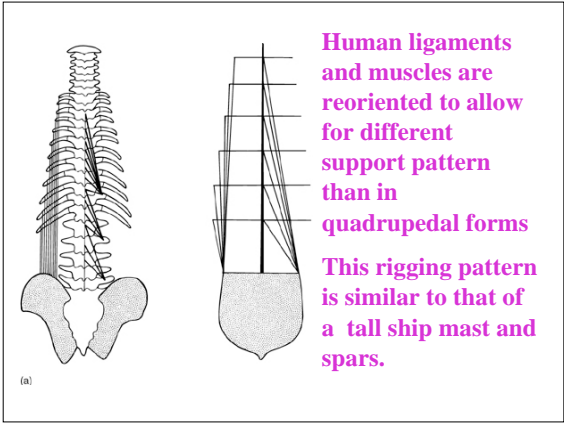
Why did this occur?



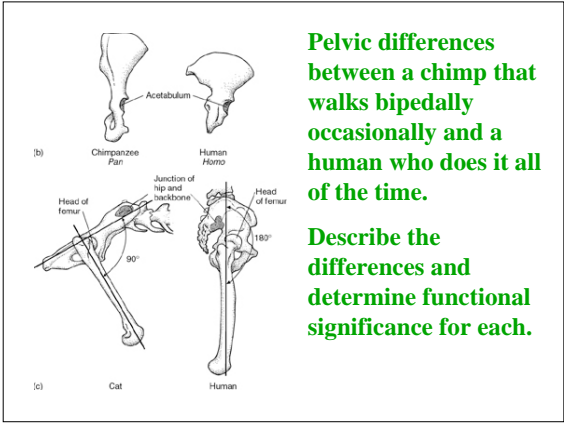
Identify how the different vertebral regions in the bird function. Some areas (which?) are heavily fused and others have great mobility? Why does this occur for each region? How does it occur for each region?



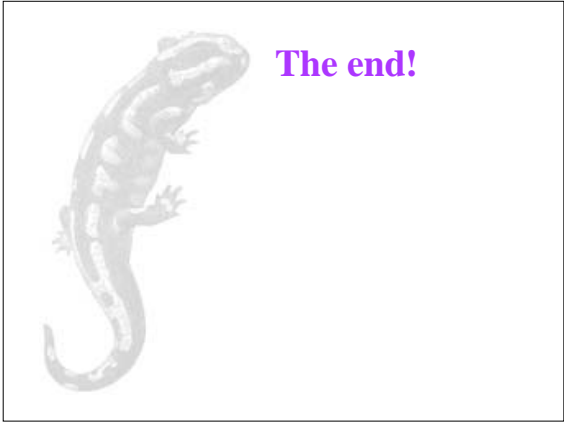
Human bipedality differs from that of primates. Explain why and the correlated anatomical changes that go with each form of bipedal locomotion.



Human ligaments and muscles are reoriented to allow for different support pattern than in quadrupedal forms. This rigging pattern is similar to that of a tall ship mast and spars.



Pelvic differences between a chimp that walks bipedally occasionally and a human who does it all of the time. Describe the differences and determine functional significance for each.



The end!
