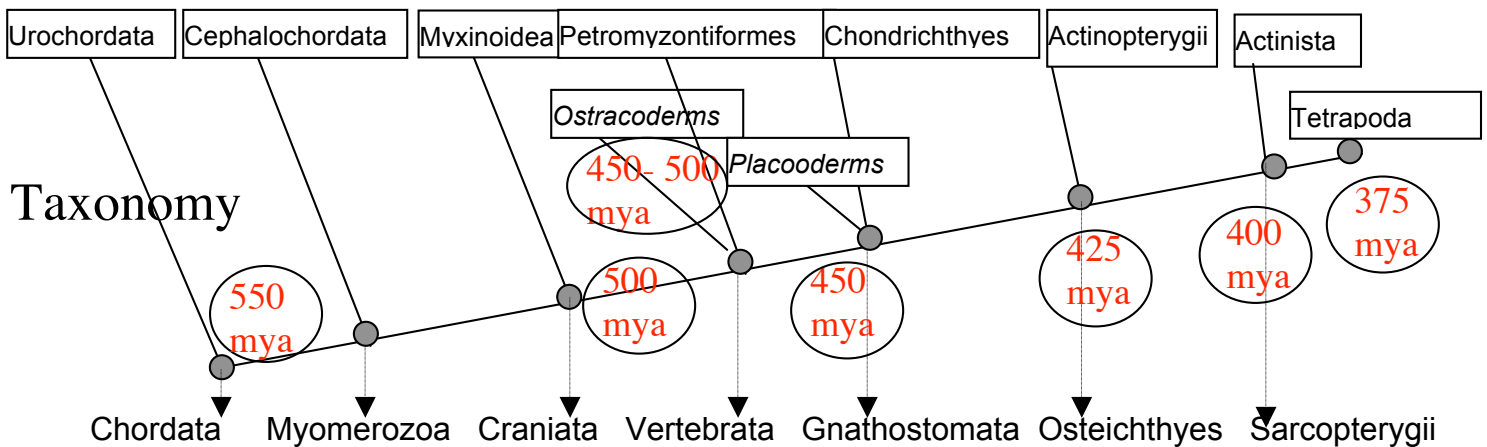


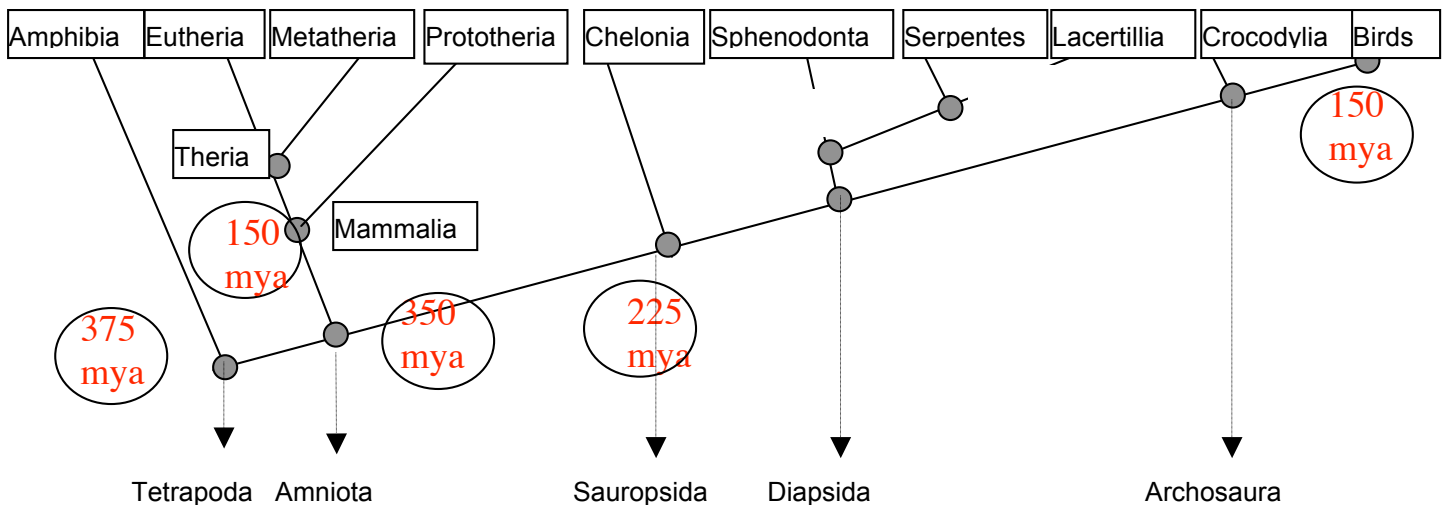
Additional Diversity Notes

Use this updated cladogram to organize your thoughts as you read the diversity lab. You should add additional details as you read the lab exercise.

Cladogram of Chordates: Non-tetrapods



Cladogram of Chordates: Tetrapods (terrestrial) Note: extant Sphenodonta = *Tuatara*



- 1) Deuterostomata (deuterostome development, more in Reproduction and Development lecture).
- 2) Chordata (4 features: Notochord, Dorsal Hollow Nerve Cord, Post-Anal Tail, Pharyngeal gill slits).
- 3) Myomerozoa (somites – bands of muscles along notochord/vertebral column during development)
- 4) Craniata (fibrous plates within cranium [skull]).
- 5) Vertebrata (vertebra – extensions present for muscle attachment, protection).
- 6) Gnathostomata (jaws).
- 7) Osteichthyes (endochondral bone – bone replaces cartilage, air sacs, lepidotrichia).
- 8) Sacropterygii (monobasal limbs, limb articulation).
- 9) Tetrapoda (4 limbs, neck, alveoli, 3 chambered heart).
- 10) Amniota (amniotic egg with extra-embryonic membranes).
- 11) Saurapsida (suborbital fenestra).
- 12) Diapsida (2 temporal fenestra).
- 13) Archosauria (gizzard, Antorbital fenestra).