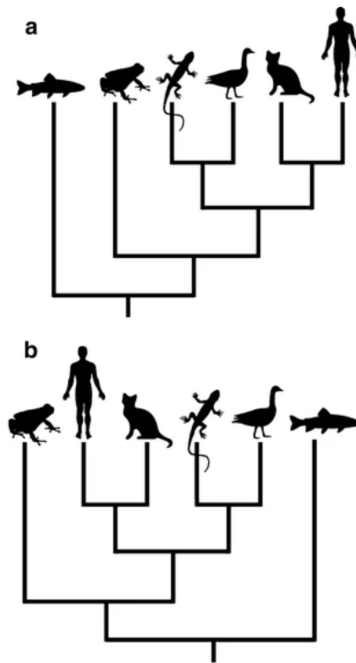


Ornithology Week 1 Practice Problems: Diversity and Taxonomy

- 1) Endothermy is an apomorphy for modern birds (**T** or **F**)
- 2) Which of the following are avian apomorphies? (You may select multiple answers.)
 - a) feathers
 - b) furcula
 - c) uncinat processes
 - d) the larynx
 - e) the gizzard
- 3) Select the answer that correctly describes hierarchical taxonomic relationships (i.e., the taxon on the left encompasses the taxon immediately to its right, and so on).
 - a) Neognathae > Neoaves > Telluraves
 - b) Neognathae > Neoaves > Telluraves
 - c) Telluraves > Neoaves > Sphenisciformes
 - d) Paleognathae > Neognathae > Aequornithes
- 4) Consider the evolutionary trees (*phylogenies*) below (from Gregory 2008, *Evolution: Education and Outreach*):
 - Do they show the same set of relationships? (Y / N)
 - In tree **a**, is the frog more closely related to the fish or the lizard? (Fish / Lizard)



- 5) Describe why modern birds can be considered an adaptive radiation.