

**Useful Information to Learn for LIZARD LAB
(according to Kristiina Hurme, a past Herpetology TA)**

- Phylogenetic groupings
 - Iguania vs. Scleroglossa
 - Within Scleroglossa
 - Gekkota
 - Amphisbaenia
 - Scincomorpha
 - Anguimorpha
 - KNOW:
 - Members of each clade
 - Within each grouping, know who is closest relative of another (basically, memorize the tree, but be able to retrieve information on command)
 - Characters to identify them based on ID or natural history
 - Old world or new world?
 - Examples of CONVERGENT EVOLUTION

- How many clades (families or subfamilies) have LEGLESS lizards (not including snakes)?
 - Are they burrowing or terrestrial?
 - Is there sexual dimorphism?
 - Do they have short or long tails? What is the significance of tail length?

- Give examples of CONVERGENT EVOLUTION for:
 - Desert ant-eating specialist
 - Lizard that runs across water
 - Herbivorous
 - Flat bodies, fit into small crevices
 - Legless, terrestrial
 - Territorial, sit-and-wait foraging
 - Large, active predator
 - Desert species with fringed toes
 - Sand-dwelling species
 - Lacks eyelids

- If a family is mostly oviparous, what habitat characterizes the few viviparous species or populations? Why is vivipary advantageous?

- Find characters (ways to ID, distribution, etc.) to separate these confusing families.
 - Lacertidae vs. Teiidae
 - Anguidae vs. Gerrhosauridae
 - Tropiduridae vs. Agamidae
 - Tropiduridae vs. Phrynosomatidae