

Life in Cold Blood: Classification of Amphibians and Reptiles Lab



Eastern Hognose Snake



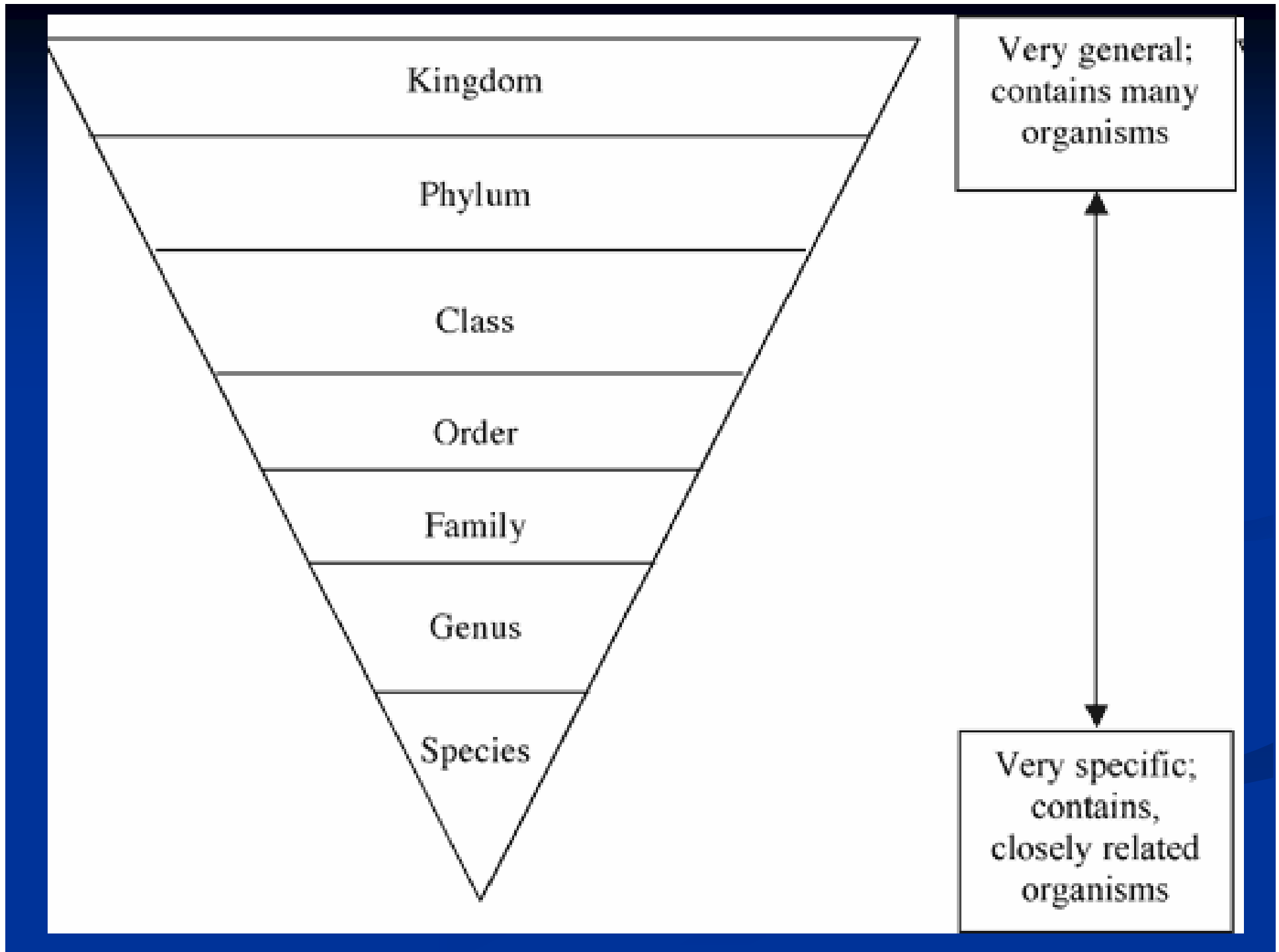
Photo by Aubrey Heupel

Green Tree Frog

Pre-Lab Question

- Separate the items below in 2 groups, and then tell why you divided them that way.
 - Stove, refrigerator, TV, radio





Kingdom

Phylum

Class

Order

Family

Genus

Species

Very general;
contains many
organisms

Very specific;
contains,
closely related
organisms

Amphibians and Reptiles

- Regulate temperature from outside sources
 - Ectothermic (cold-blooded)

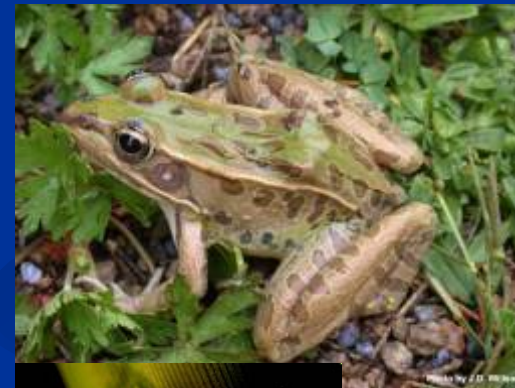


Amphibians

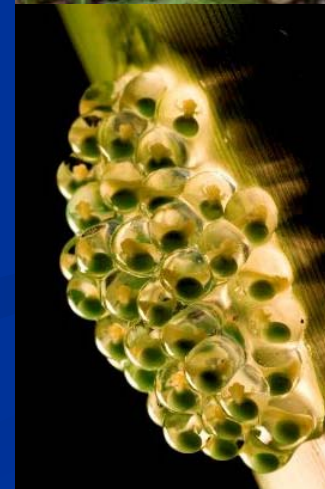
- No claws on toes
- Shell-less eggs
- Skin:
 - Moist
 - Breathe through their skin



Toed Salamander



Southern Leopard Frog



Green Tree Frog

Frogs

- Smooth or slimy skin
- Strong, long rear legs
- Feet may or may not be webbed



Toads

- **Warty skin**
 - Have large glands behind each eye that produce poison
- **Stubby bodies with short hind legs**



American Toad



Photo © Brittany Barker



Fowler's Toad

Salamanders

- Smooth, moist skin
- Long bodies and tails
- Four Limbs
- Most are small



Spring Salamander



Marbled Salamander



Two-lined Salamander

Caecilians

- No legs!
- Looks like a worm
- Very long bodies
- How is it different than a snake?



Reptiles

- Eggs have a shell
- Dry, scaly skin



Photo by J.D. Wilson

Green Anole



Photo by Michael Dorcas



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Photo © Brittany Barker



Copperhead



Photo by M.E. Dorcas

American Alligator

Alligators and Crocodiles

- Heavy scales like armor
- Eyes on top of head
- Four limbs
- Long body and tail
- Big, strong jaws and teeth



Turtles and Tortoises

- Backbone incorporated into their shell
- No teeth
 - Has a beak similar to a bird



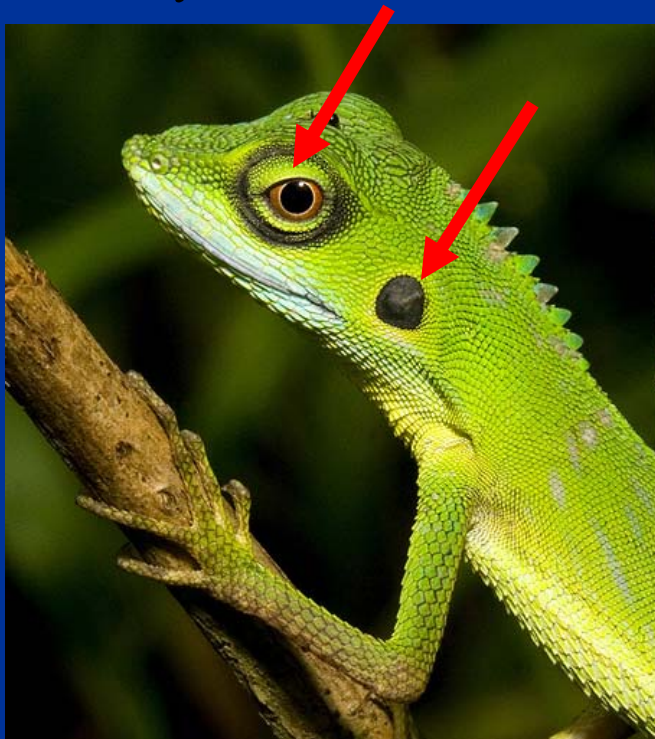
Eastern Painted Turtles



Photo by Kristine Greyson

Lizards

- Ear openings
- Teeth
- Four legs
- Eyelids



Slender Glass Lizard



Fence Lizard



Five-Lined Skink



Broadhead Skink



Slender Glass Lizard

Snakes

- Teeth
- No limbs
- Long body
- No eyelids
- No ear openings

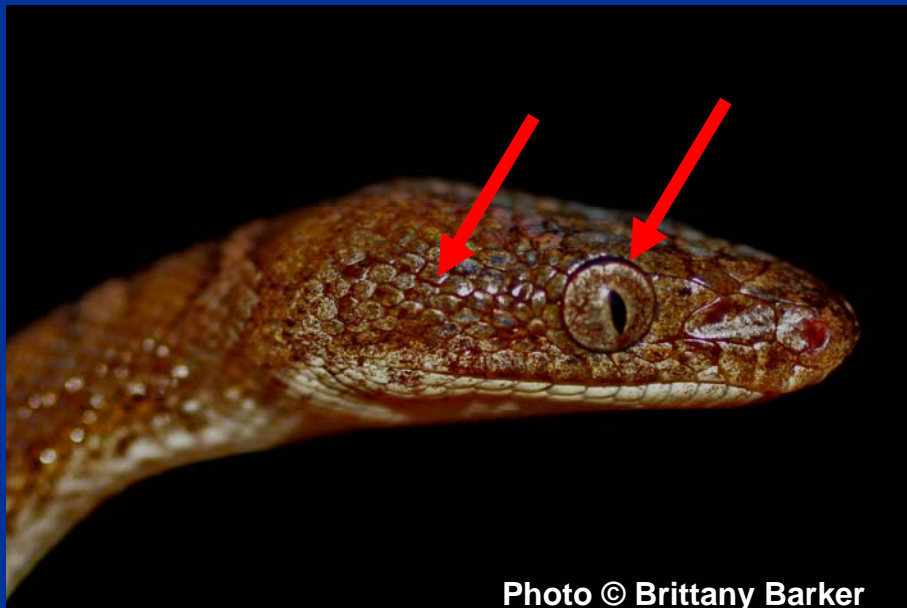
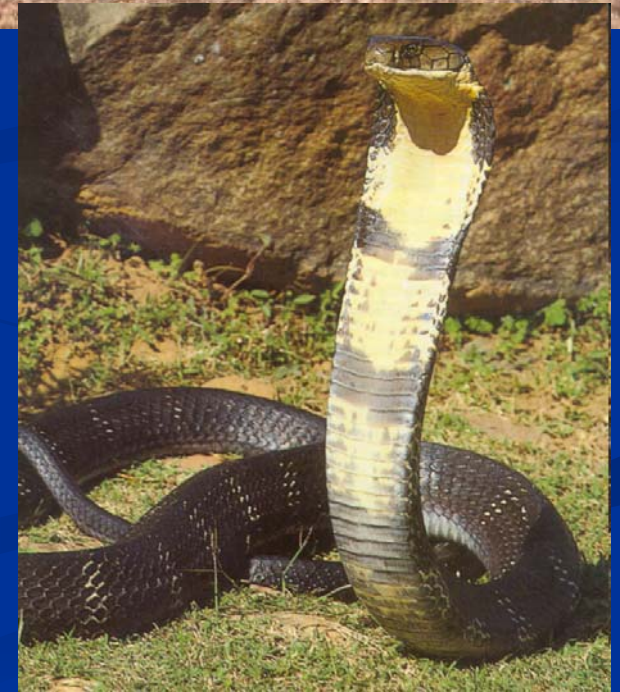
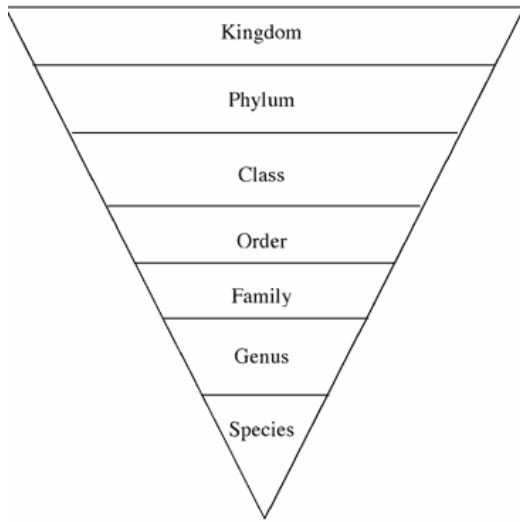


Photo © Brittany Barker

What characteristics do we need?

- What characters should we examine in order to classify amphibians and reptiles?
- Some are shared, others are unique to a single group



Class:

The Reptile Class is divided as follows:

Order:

Squamata

Testudinata

(sometimes called Chelonia)

Crocodylia

Rhynchocephalia

Family:

Snakes

Lizards

Turtles

Tortoise

Crocodiles

(includes gavials or gharials)

Alligators

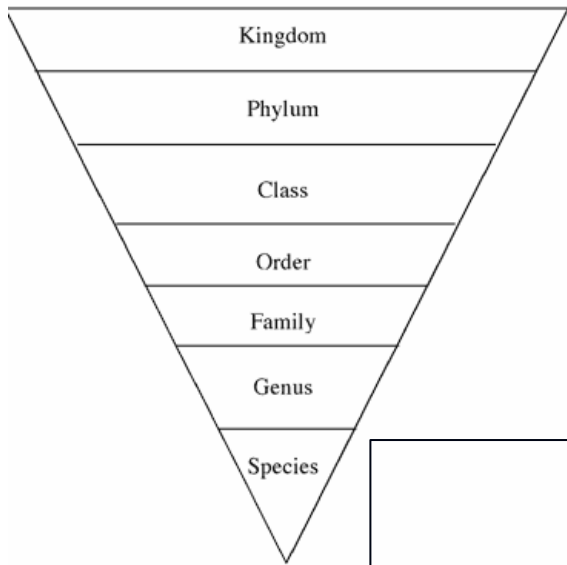
(includes caimans)

Tuatara

(only surviving species of its order)

Species:





The Amphibian Class is divided as follows:

Class:

Amphibia

Order:

Anura

Urodela

Apoda

Families:

Frogs
(includes toads)

Salamanders
(includes newts)

Caecilians

Species:



(Fill in the species names of your choice.)