

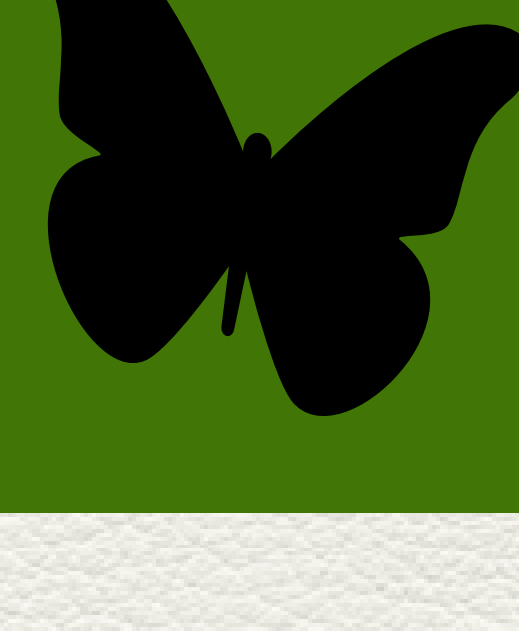
Animal Classification

The Highest Level of classification for animals is Vertebrates and Invertebrates

Vertebrates

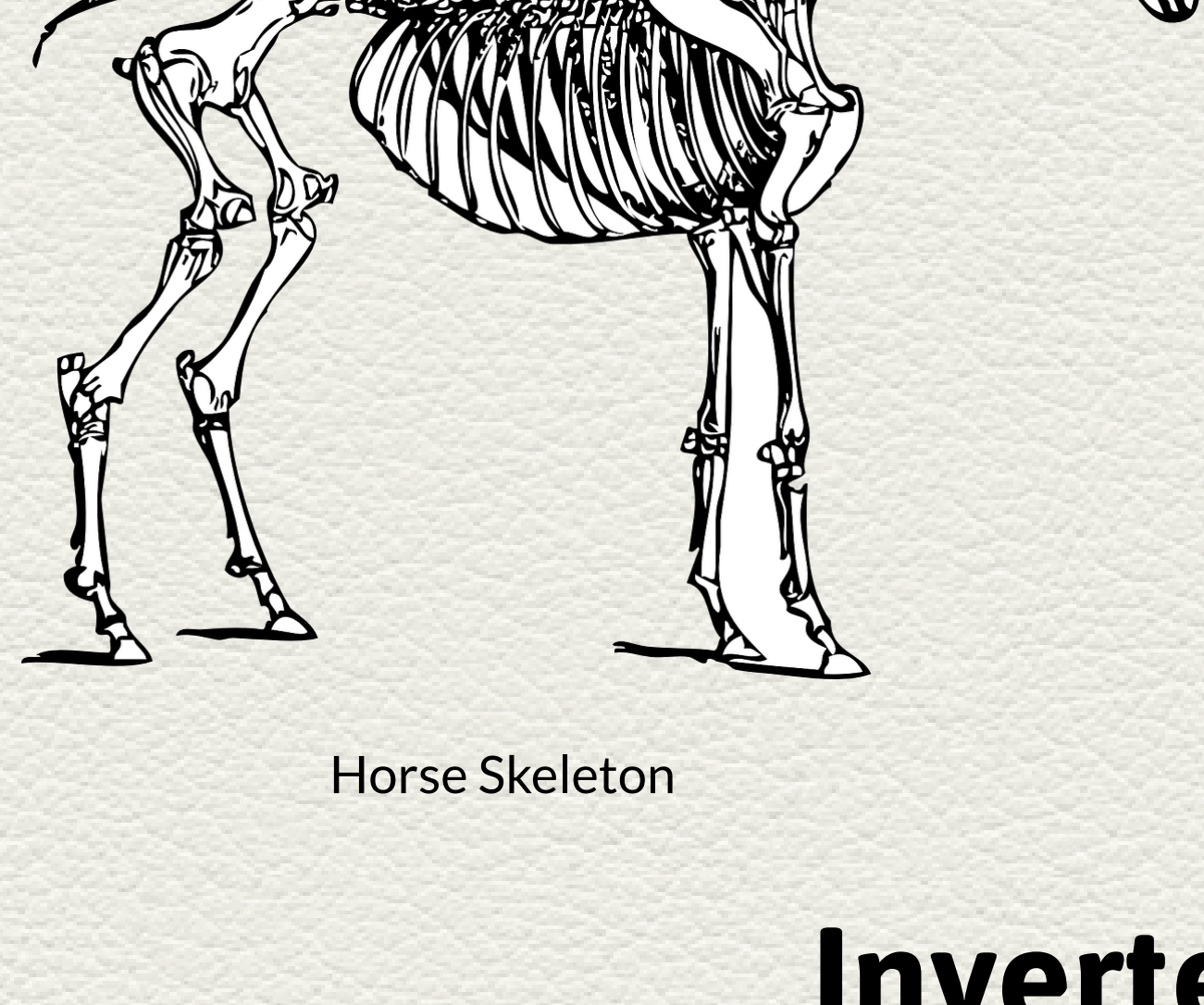


Invertebrates

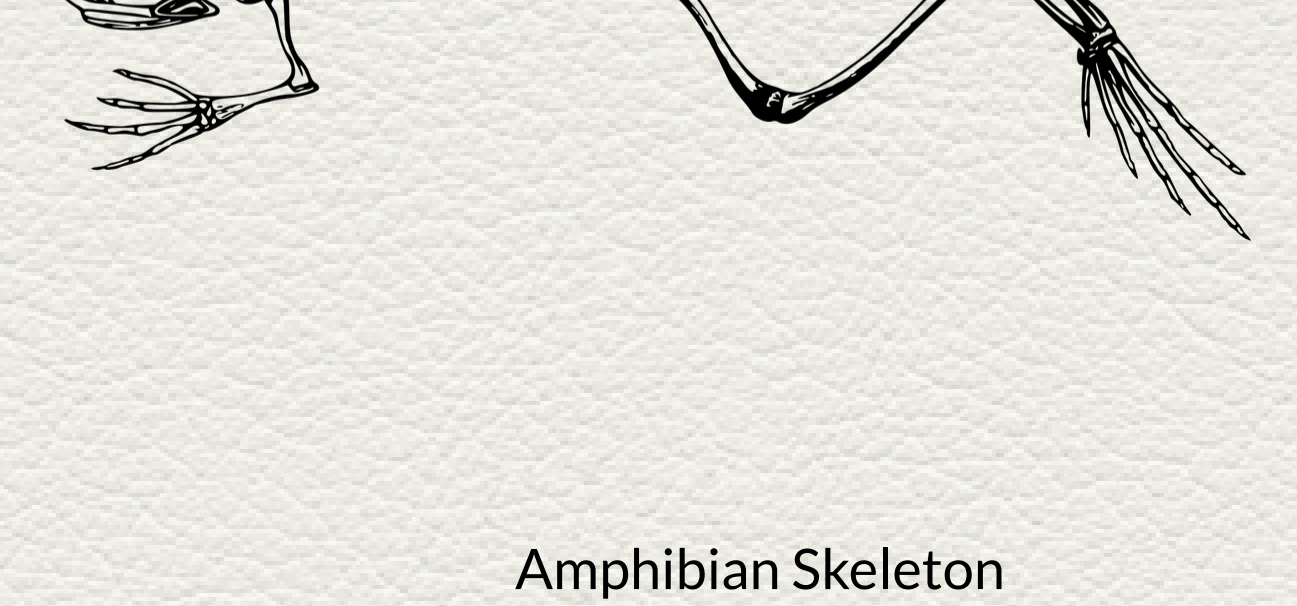


Vertebrates

Vertebrates are characterized by an internal skeleton with a backbone of vertebrae.



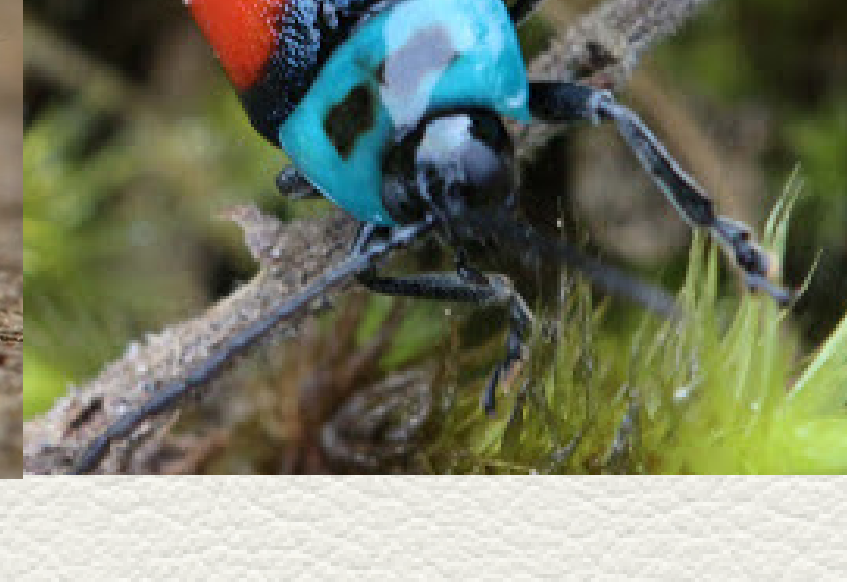
Horse Skeleton



Amphibian Skeleton

Invertebrates

Invertebrates do not have a backbone. Common animals include insects, snails, earthworms and jellyfish.



Vertebrates vs Invertebrates

Vertebrates

- Internal Skeleton made of Bone
- Well-Developed Brain
- Gills or Lungs
- Advanced Nervous System
- Digestive System

Invertebrates

- No Backbone
- Outer Skeleton
- Soft-Bodied
- Cold-Blooded
- Change Form as they Grow

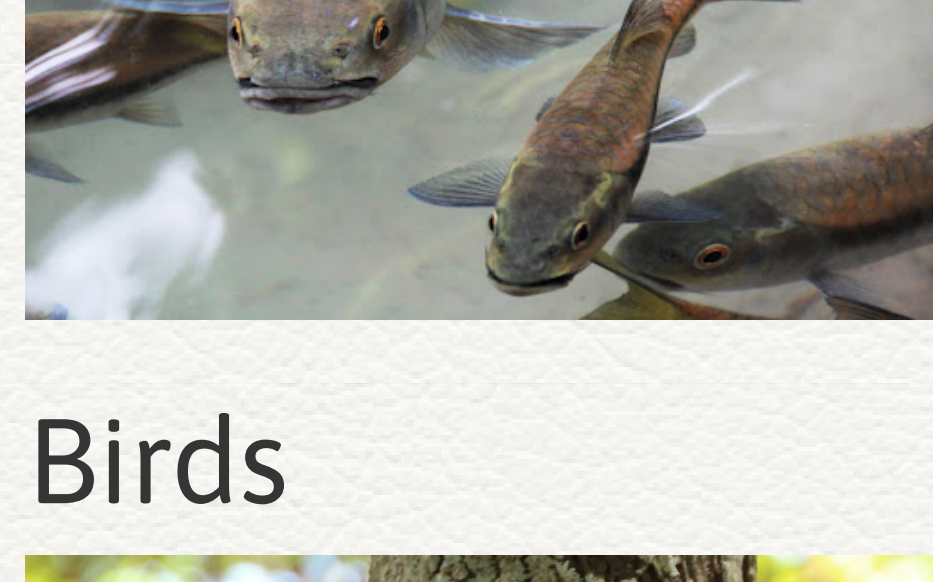
6 Animal Groups

Beyond vertebrates vs invertebrates, scientists classify Animals into 6 major groups

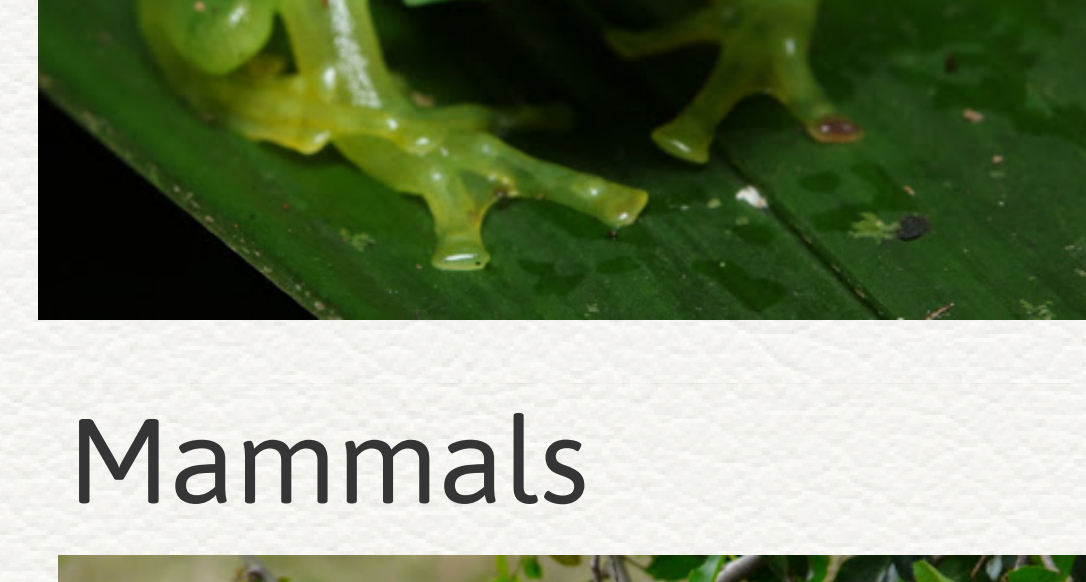
Invertebrates



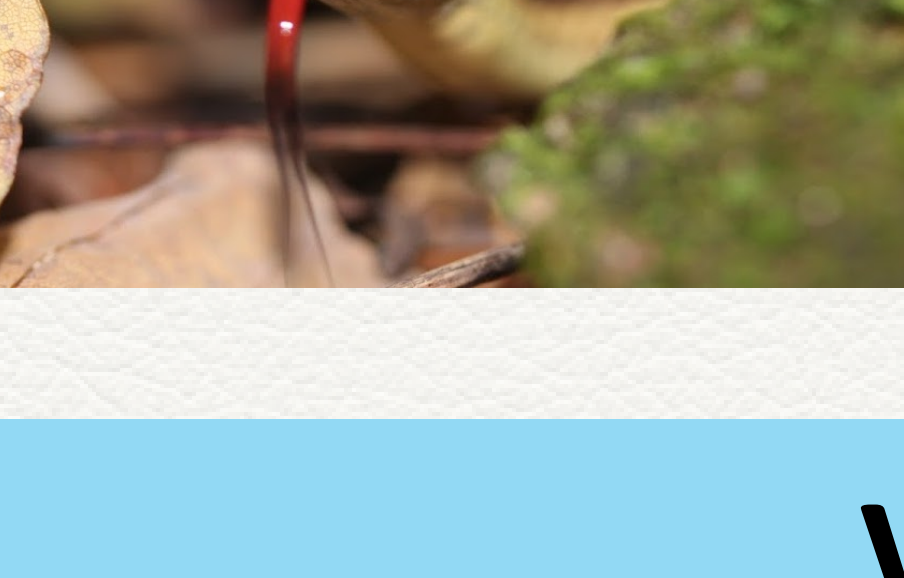
Fish



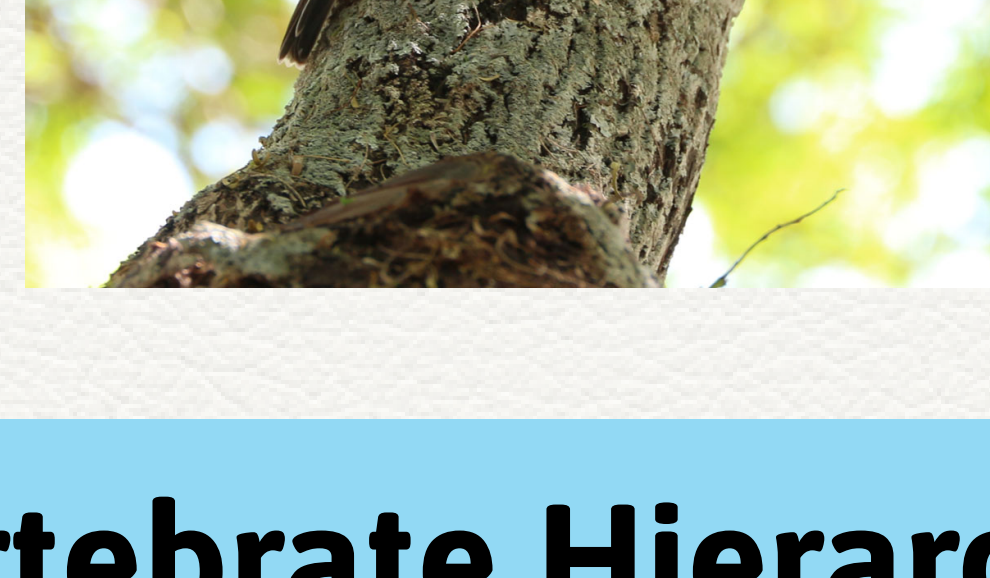
Amphibians



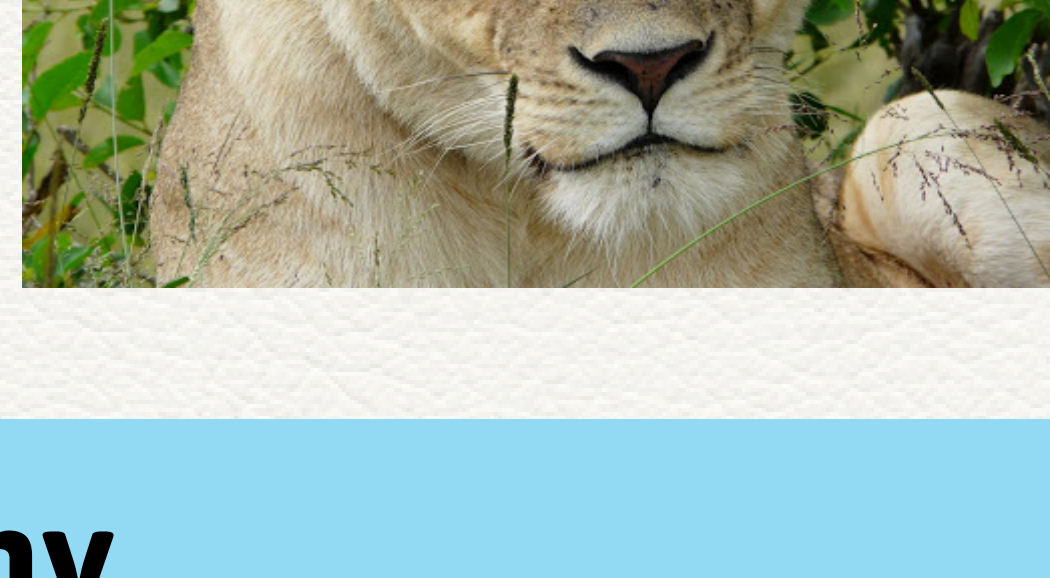
Reptiles



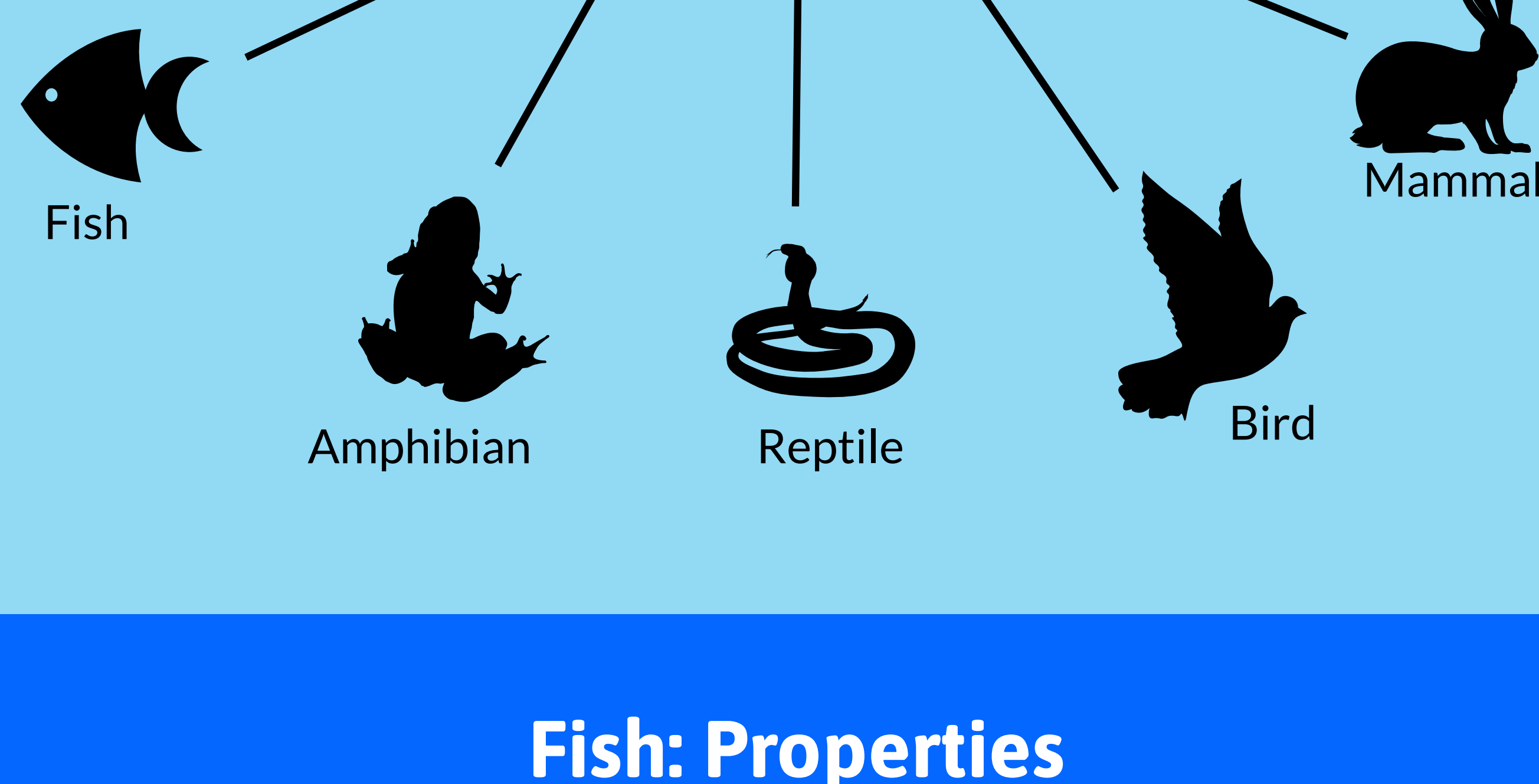
Birds



Mammals

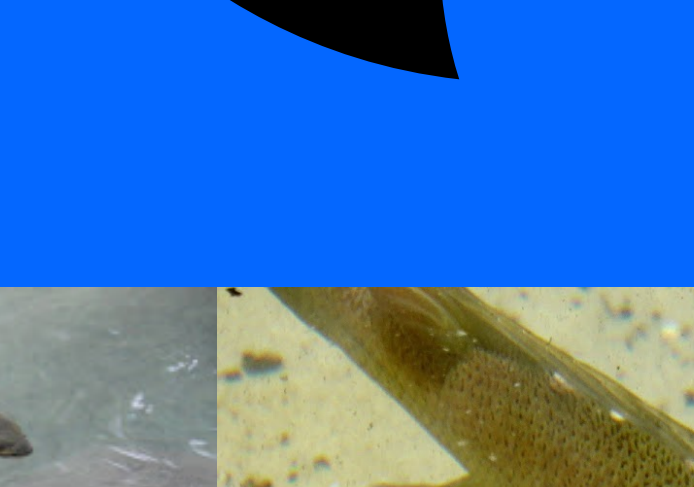


Vertebrate Hierarchy



Fish: Properties

- Cold-blooded
- Live in water entire life
- Lay eggs
- Gills to breathe
- Have fins



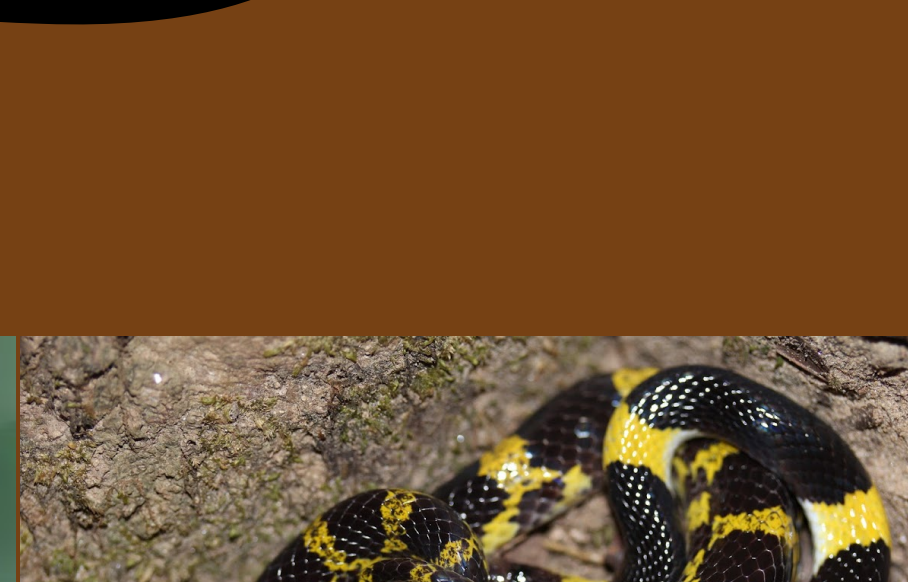
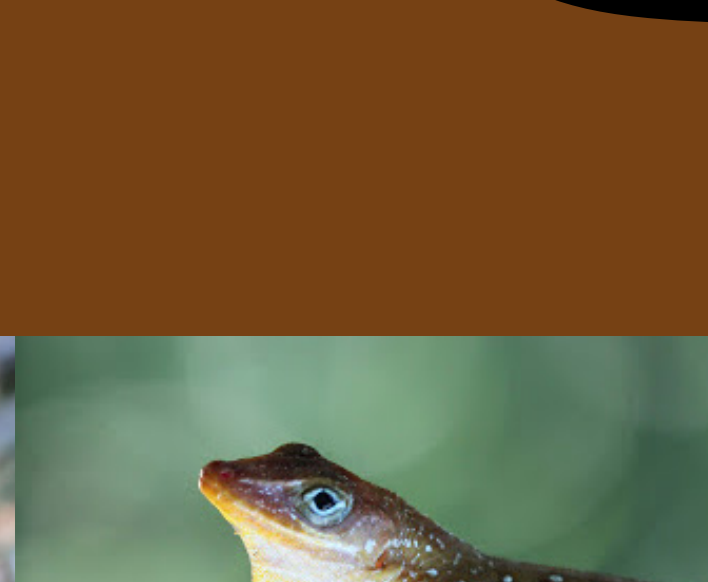
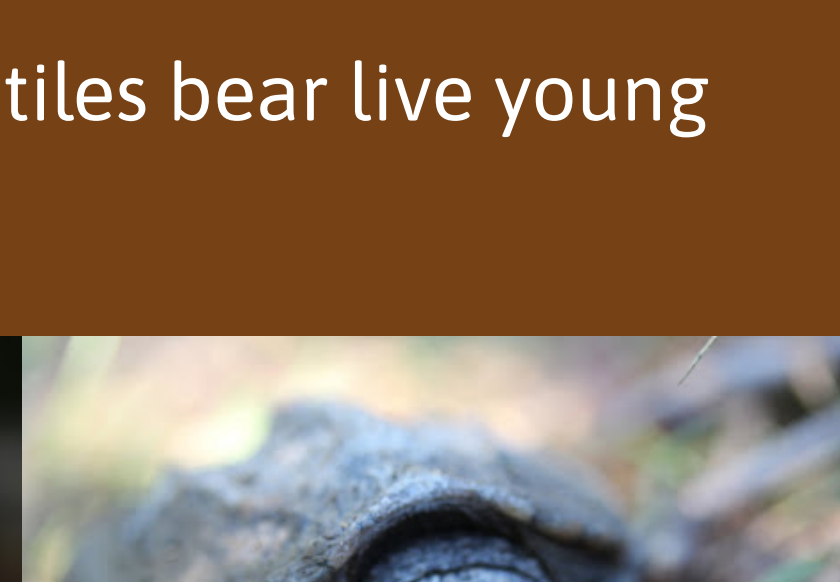
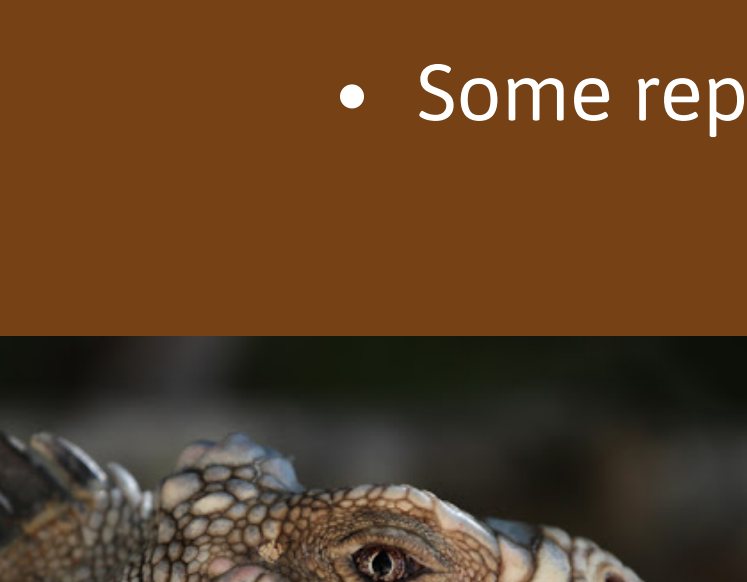
Amphibian: Properties

- Cold-blooded
- Moist and smooth skin (no scales)
- Breathe through lungs and skin
- 2 pairs of limbs and webbed feet
- Most lay unshelled eggs in water



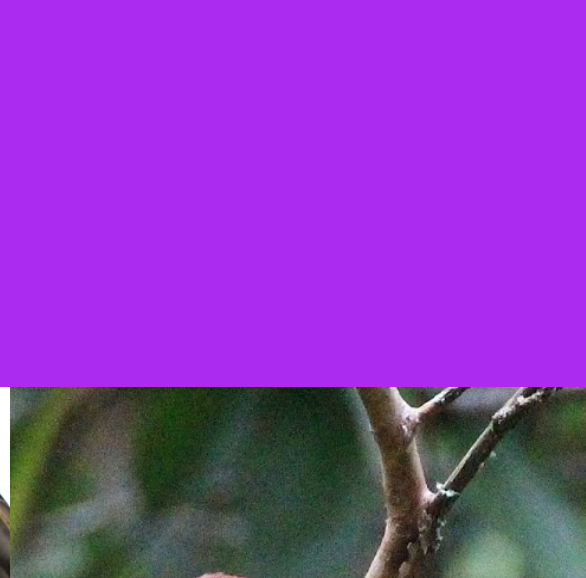
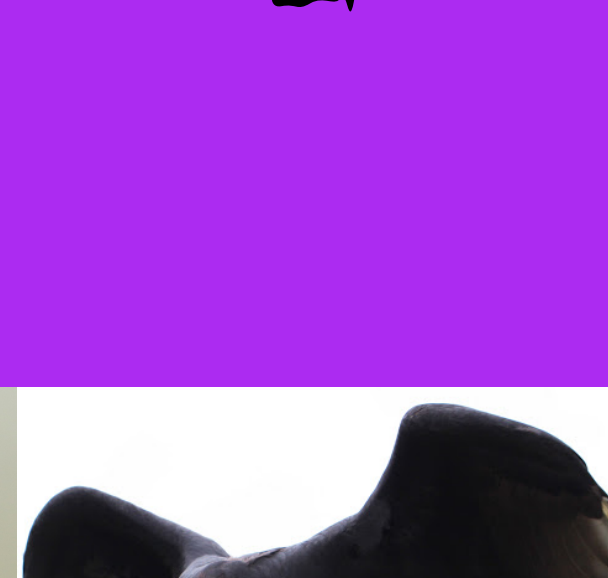
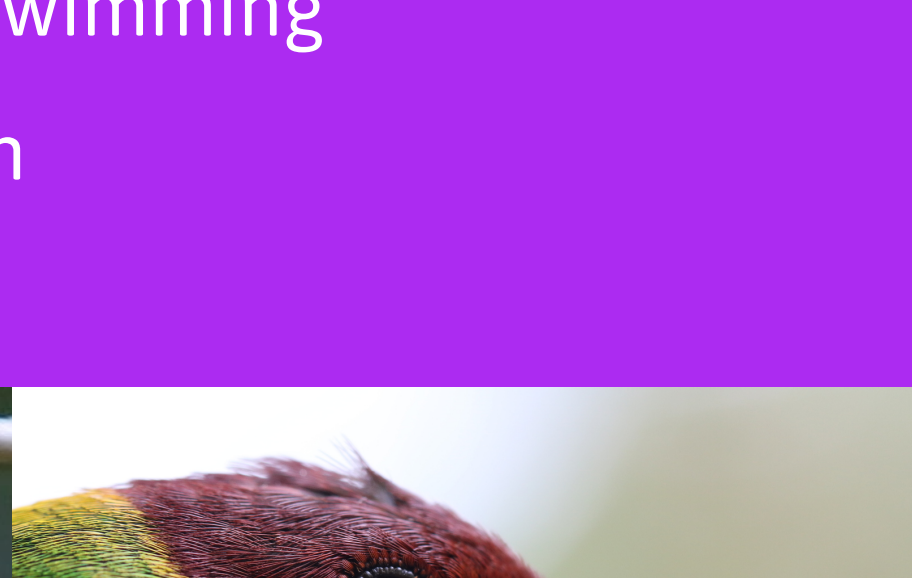
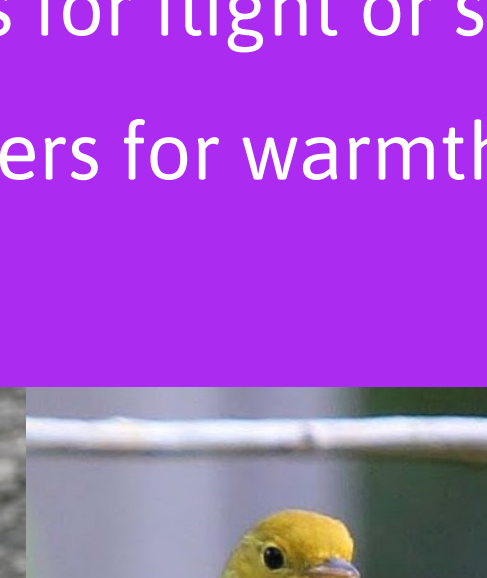
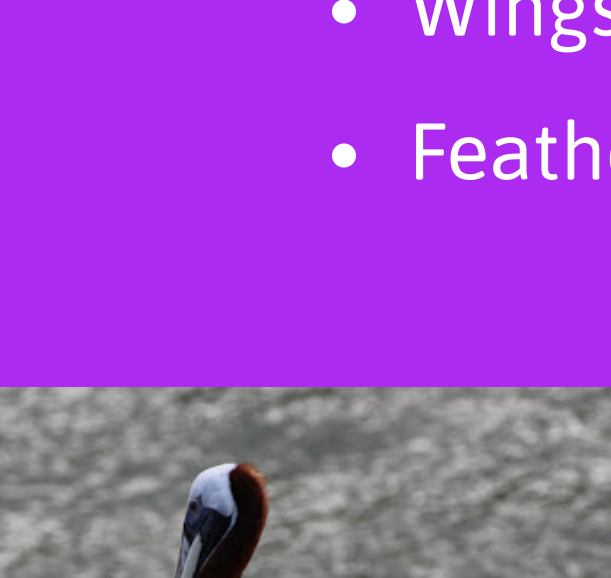
Reptile: Properties

- Cold-blooded
- Scales or scutes on skin
- Lay shelled eggs on land
- Breathe through lungs
- Some reptiles bear live young



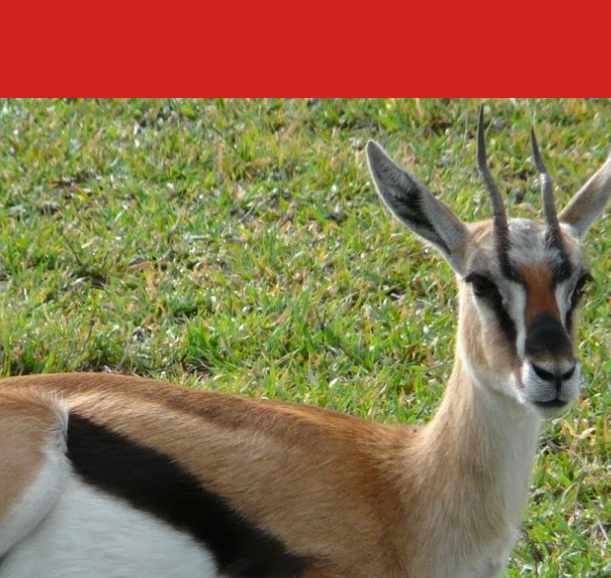
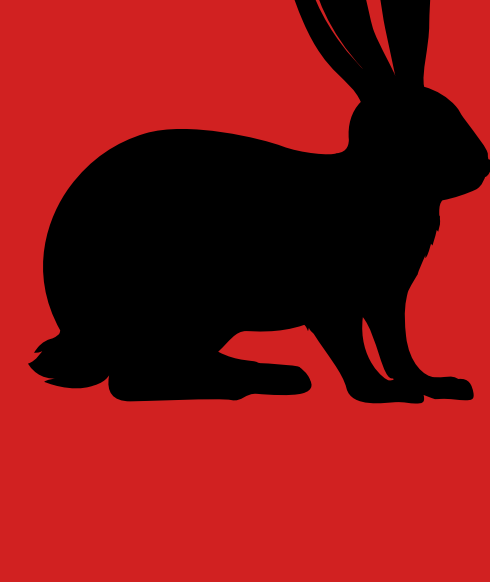
Bird: Properties

- Warm-blooded
- Beaks or bills
- Lay hard-shell eggs (usually in a nest)
- Breathe through lungs
- Wings for flight or swimming
- Feathers for warmth



Mammal: Properties

- Warm-blooded
- Hair or fur
- Birth live young
- Young fed milk
- Four-chambered hearts



Fun Facts!



- Over 95% of animal species are invertebrates! While we usually think about animals as reptiles, birds or mammals - vertebrates actually make up less than 5% of total species.
- Within invertebrates, insects are by far the largest category! Scientists estimate between 2 million and 30 million species of insects.

Wildlife Photography by Dan Doucette

