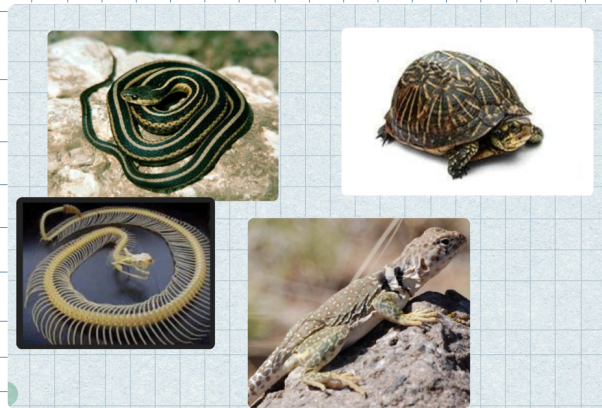


Reptiles

Domain. Eukaryota
Kingdom Animalia
Phylum Chordata
Class. Reptilia

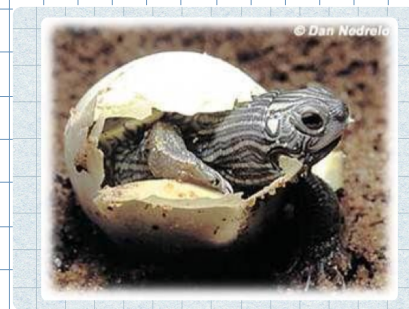


Class Reptilia (to + creep)

Dry skin and scales. Internal fertilization
Carnivorous (turtles omnivorous) Cold blooded

First vertebrates with **Amniotic Eggs**

- Eggs with extra embryonic membrane
- Protect embryo from dehydration
- Cushions embryo
- Promotes gas transfer
- Stores waste



Oviparous- Egg laying
Turtles, most snakes & lizards.

Ovoviviparous- Internal eggs
Some lizards

Viviparous- Live young
Some snakes



Domain. Eukaryota
Kingdom Animalia
Phylum Chordata
Class. Reptilia
Order Squamata
Family
Genus
Species



Order Squamata (scale + to bear)

Lizards (Suborder Sauria)

~3,300 species

Usually 2 pairs of walking legs

- Visible Ear holes
- Eye lids
- Chromatophores

Snakes (Suborder serpentes)

~2,300 species

Elongated body lacking limbs

200+ vertebrae

✂ Upper & lower jaw movable and hinged.

✂ Elongation of body resulted in loss of left lung and right kidney.

Skin covered in Keratin scales.

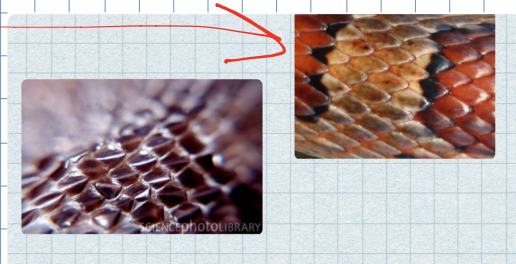
Unlike amphibians, reptile skin does not aid in respiration.

Nonkeeled scale

Non-venomous snakes

Keeled scale

Venomous snakes



Ventral scales larger to facilitate movement.

Ecdysis (ek-dis-is): Periodic shedding of the skin.

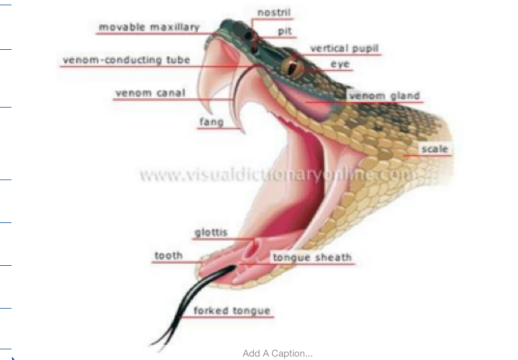
Begins with head



Vipers (family Viperidae) possess hollow fangs to inject venom

Pit Vipers have a Pit Organ on each side of the face that is heat-sensitive.

Usually nocturnal so this aids their hunting.



Ectotherms: Rely on external heating source to warm their body. (Cold-Blooded)

To stay active reptiles must maintain a temperature between 25-37 degrees Celsius.

May form Hibernacula (large groups of reptiles in a group) in the winter to stay warm.



Snakes of Kansas

NORTH AMERICAN RACER
Coluber constrictor

smooth scales
blue-grey/greenish-blue
2' - 4' in length
constrictor



SPECKLED KINGSNAKE
Lampropeltis holbrooki

black with yellow speckled spots
3' - 4' in length
constrictor



WESTERN MILK SNAKE
Lampropeltis gentilis

alternating color bands
red - black - yellow
2' - 3' in length



RING-NECKED SNAKE
Diadophis punctatus

body grey-black with orange neck
bright orange ventral tail
eat earthworms, insects, etc
rear-fanged harmless



COMMON GARTER SNAKE
Thamnophis sirtalis

dorsally striped
checkered black/red dorsal
2'-3' length



WESTERN RIBBON SNAKE
Thamnophis proximus

orange middorsal stripe
3' - 4' length
greenish ventral
tail 1/3 total length



GREAT PLAINS RAT SNAKE
Pantherophis emoryi

light grey/tan with darker blotching
2' - 4' length
divided anal scales
dark banding across eyes



WESTERN RAT SNAKE
Pantherophis obsoletus

juvenile lack black color
blotches typically longer than wide



EASTERN COPPERHEAD
Agkistrodon contortrix

3' - 4' length
venomous (no rattle)
typical near water



TIMBER RATTLESNAKE
Crotalus horridus

large and stout
5' + length
venomous (with rattle)



WESTERN MASSASAUGA
Sistrurus catenatus

absent from johnson county
venomous (with rattle)



Essential question #2

How do matter and energy move through the ecosystem?