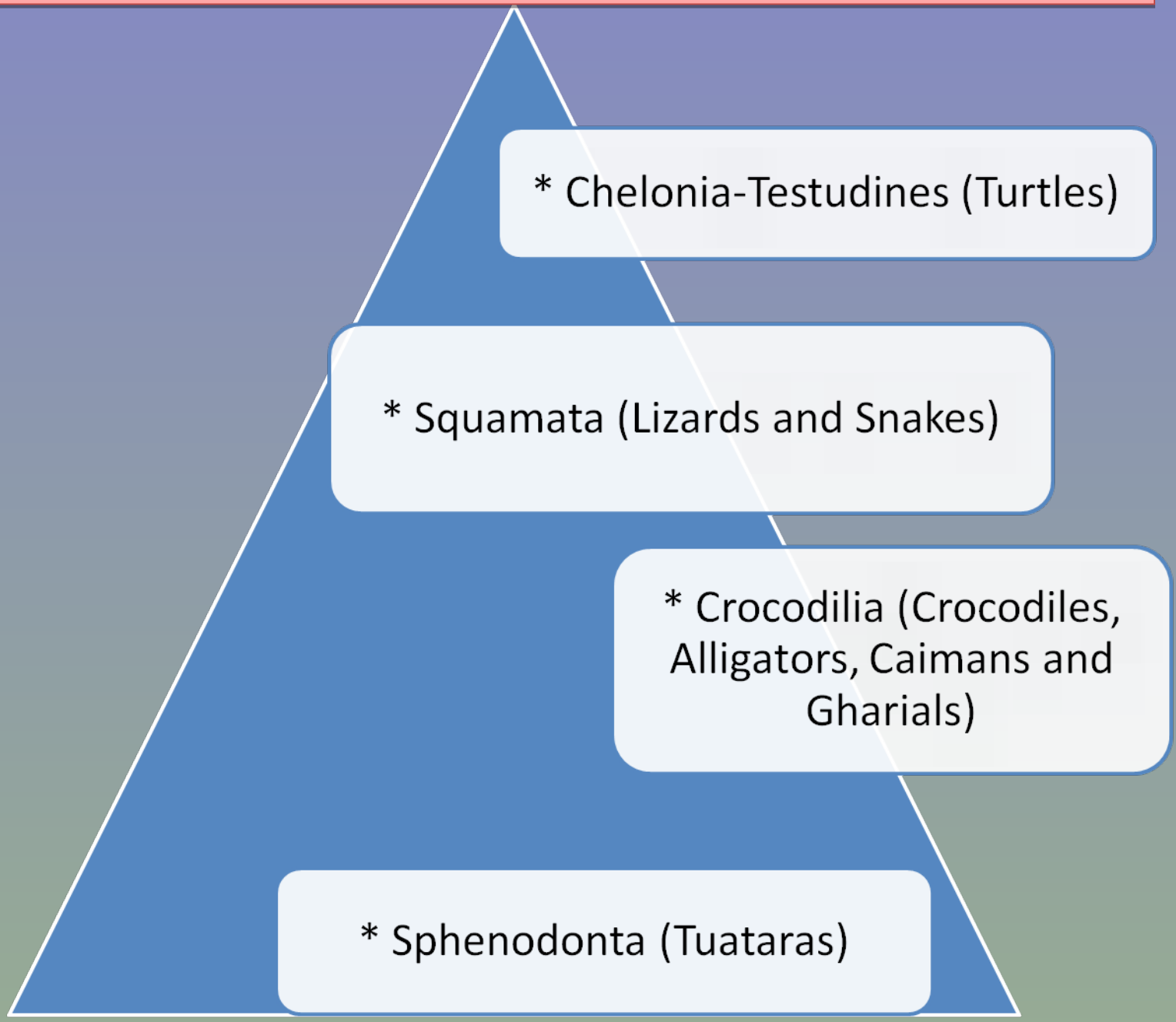
CLASS: REPTILIA

SUBCLASIS: ANAPSIDA

SUBCLASIS: DIAPSIDA (LEPIDOSAURIA)

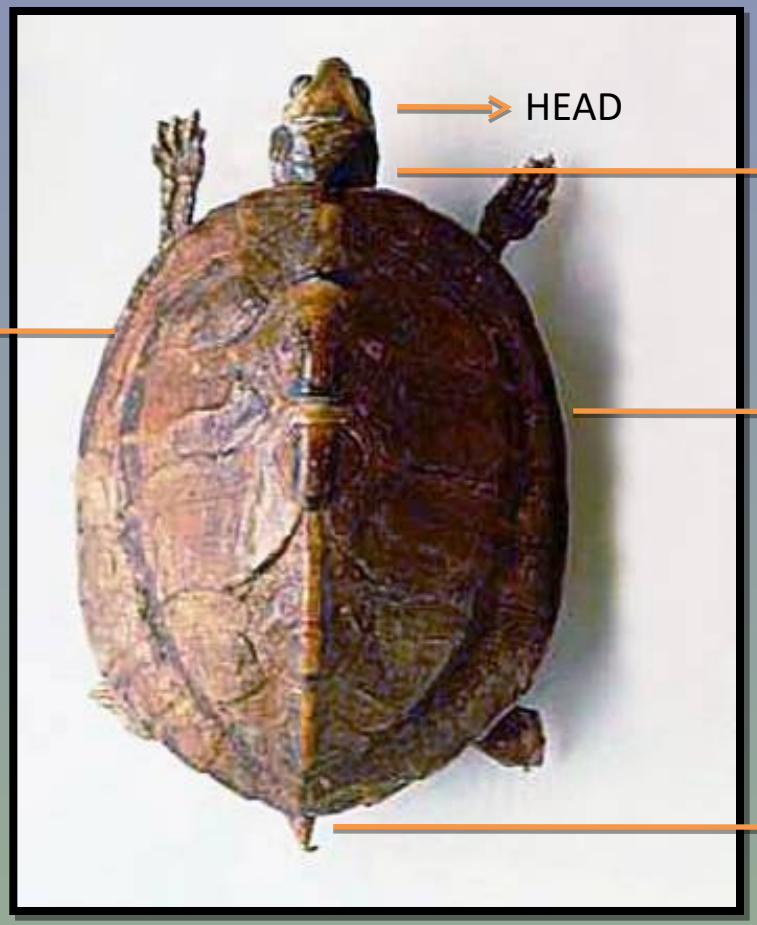
SUBCLASS: SYNAPSIDA

Today, the Reptilia class is represented with 4 orders



MORPHOLOGY OF CHELONIA

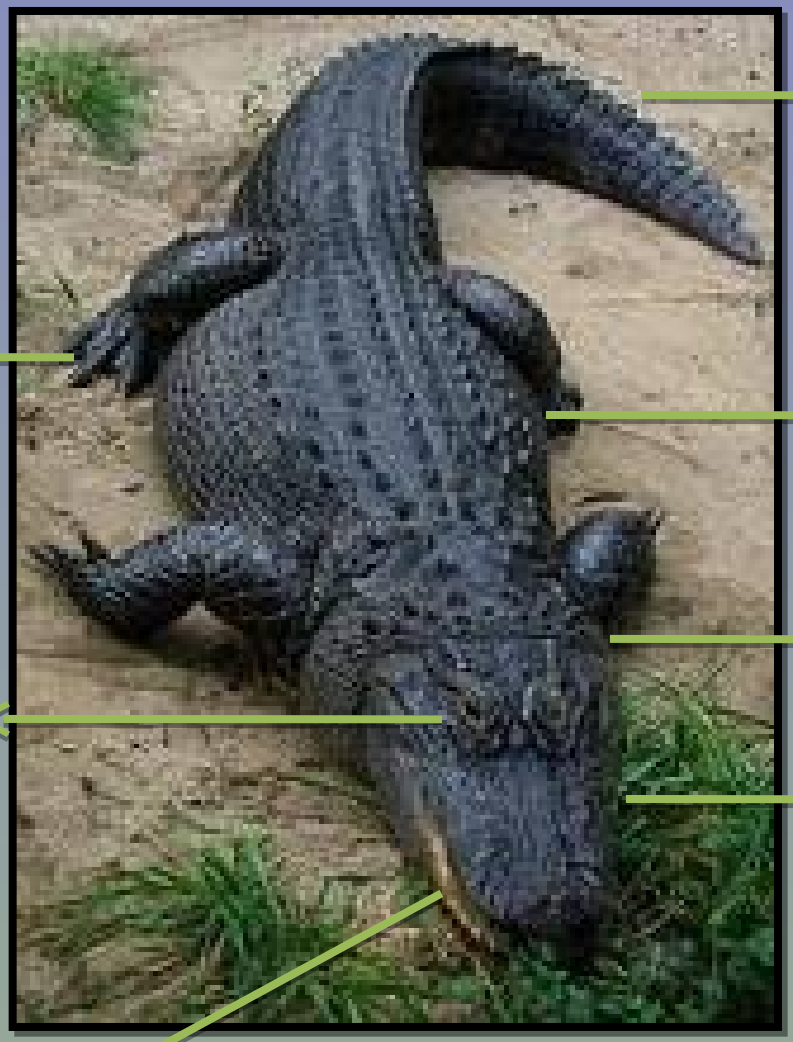
Body is located in an oval shell



PLASTRON

CARAPACE

MORPHOLOGY OF CROCODILIA



TAIL

TRUNK

NECK

HEAD

Keratinezed nails
Web between fingers

Eyes;
*On the side of head;
*Mobile;
*Upper and lower eyelids
* 3rd transparent eyelid under eyelids

Conical Teeth

MORPHOLOGY OF SQUAMATA (LIZARD-SNAKE)

LACERTILIA (LIZARD)

Round and long body

Flattened body

flattened as dorso-ventral body

LEGS (EXTREMITIES)

SLENDER-LONG

SHORT AND THICK

WITHOUT EXTREMITIES

OPHIDIA (SNAKE)

SLENDER-LONG

No eyelids
The eyes are covered with a transparent layer of keratin.

No eardrum and opening

Boa
Snake

Phython

PELVIC GIRDLE REDUCED
HINDLEGS BECOME BLIND AND REMAIN UNDER SKIN

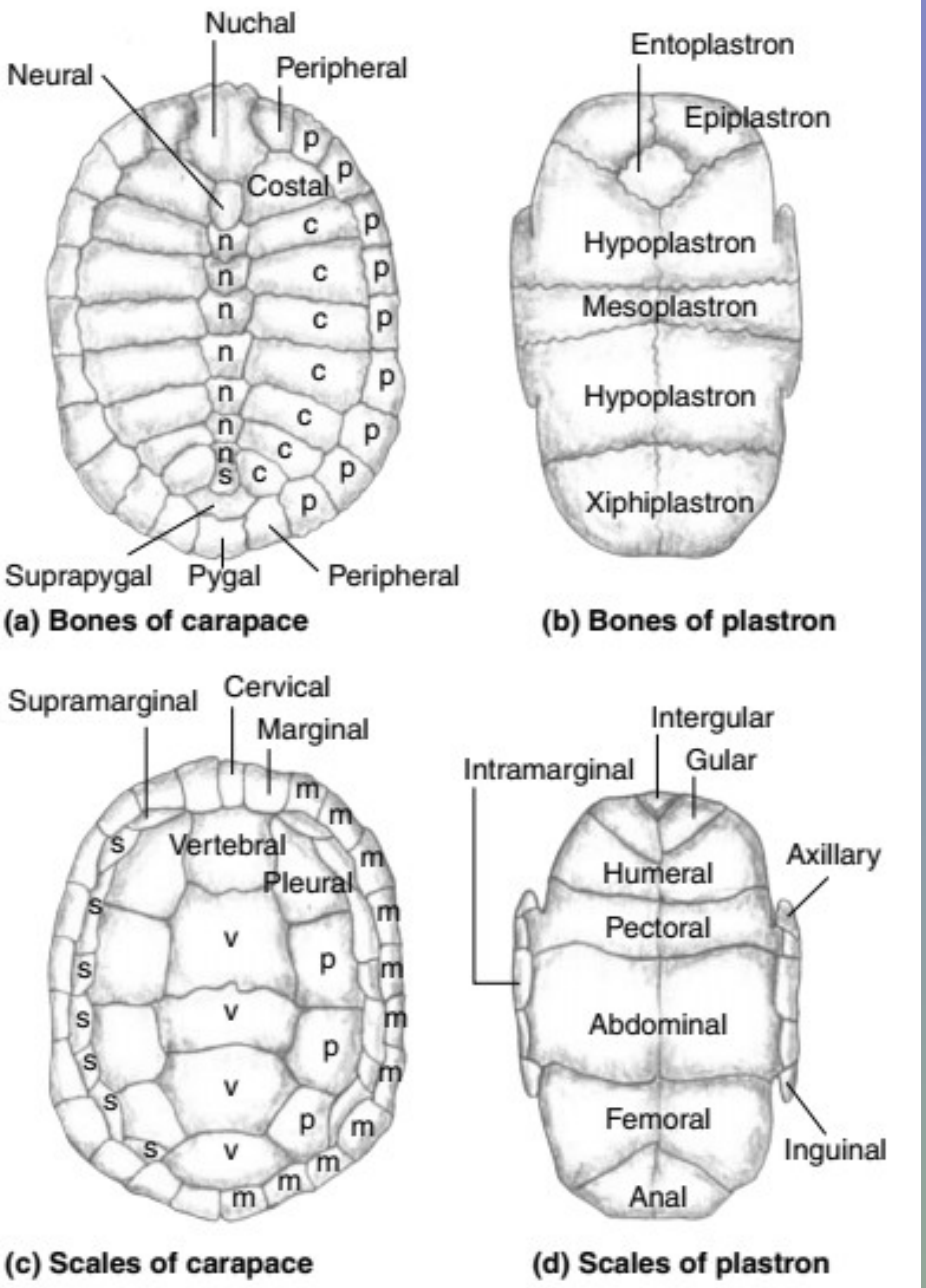
MORPHOLOGICAL DIFFERENCES BETWEEN THE SNAKE AND LIZARDS

	SNAKE	LIZARD
Front legs	None	Usually Present
Front legs gridles	None	Present
Hind legs	Rarely (blunt)	Usually
Hindlegs gridles	Rarely	Present
Sequence of single ventral scales	Usually	None
Mobile eyelids	None	Usually
Ear opening	None	Usually
Highly forked tongue	Usually	Rarely

Turtles shell

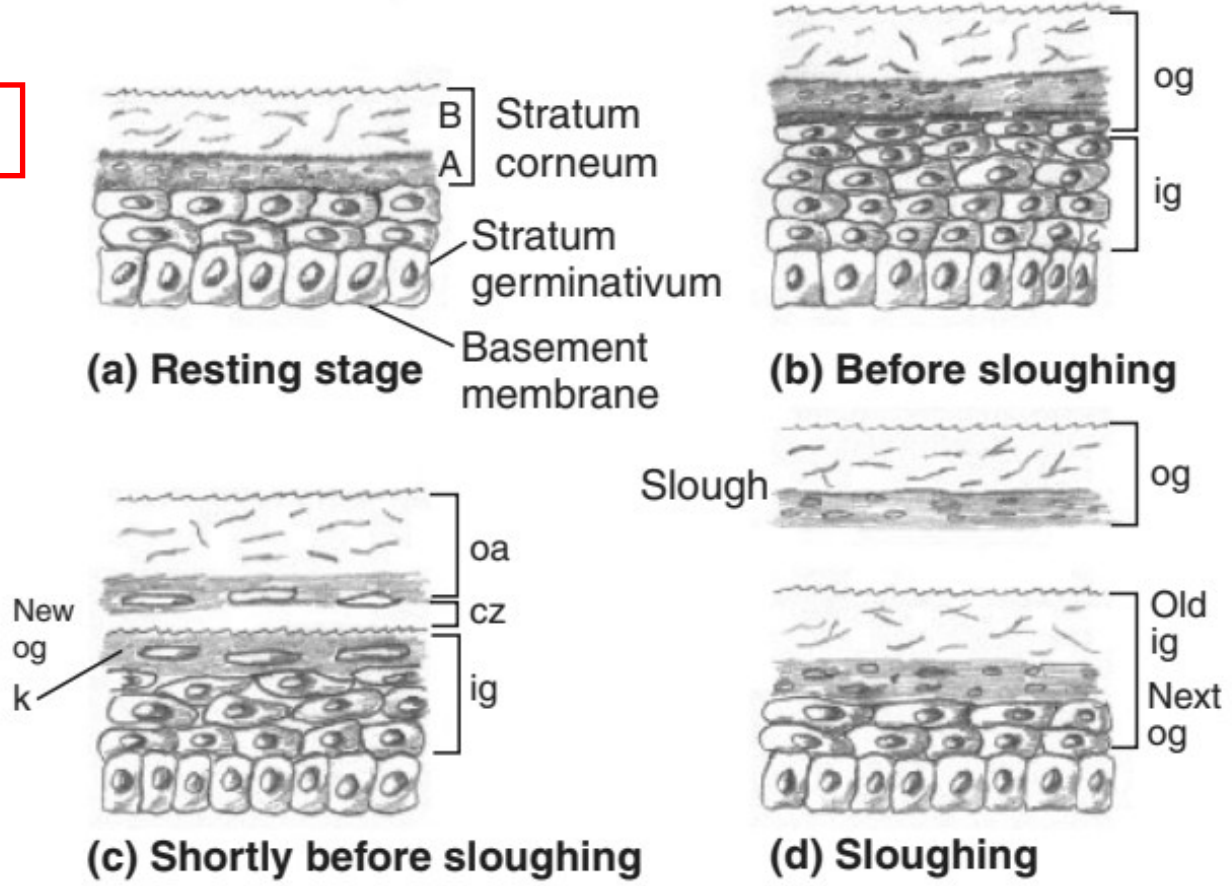
Dermal bones

Epidermal scales



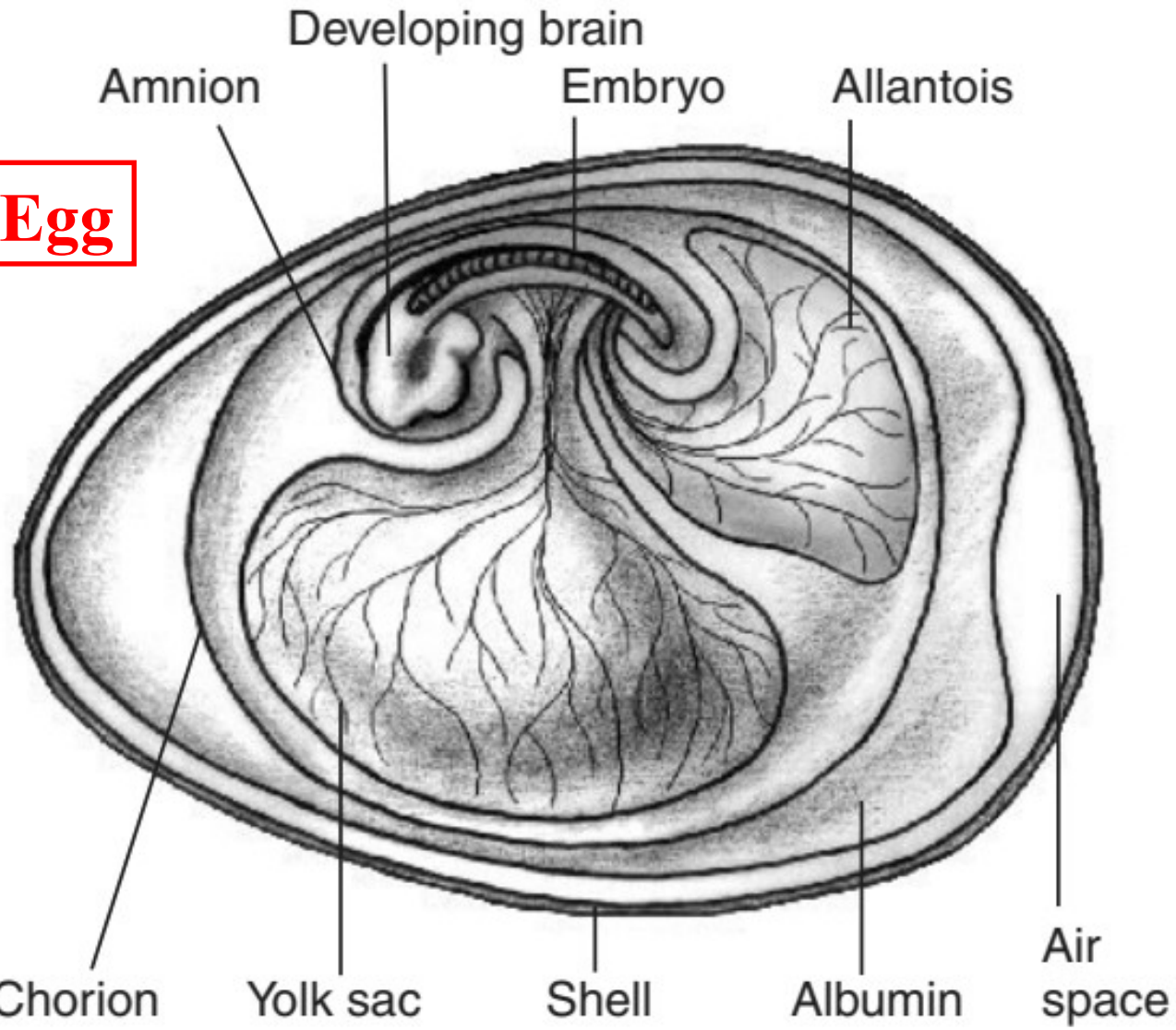
Upper: Dermal bones forming the carapace (*a*) and plastron (*b*) of a turtle. Lower: Epidermal scales covering the carapace (*c*) and plastron (*d*) of a turtle.

Sloughing cycle of a snake



Simplified diagrams showing changes in the epidermis during the sloughing cycle of a snake. (*a*) Resting stage. (*b*) Before sloughing. The basal cells have divided to form a new, inner epidermal generation (ig). The snake's color is dulled. (*c*) Shortly before sloughing. A cleavage zone appears between the two generations; the superficial part of the inner generation is becoming keratinized (*k*), and a new serrated outer epidermal generation (og) is being formed. This stage probably coincides with the clearing of the skin. (*d*) Sloughing. The original outer generation is shed, and the old inner generation becomes the next outer generation.

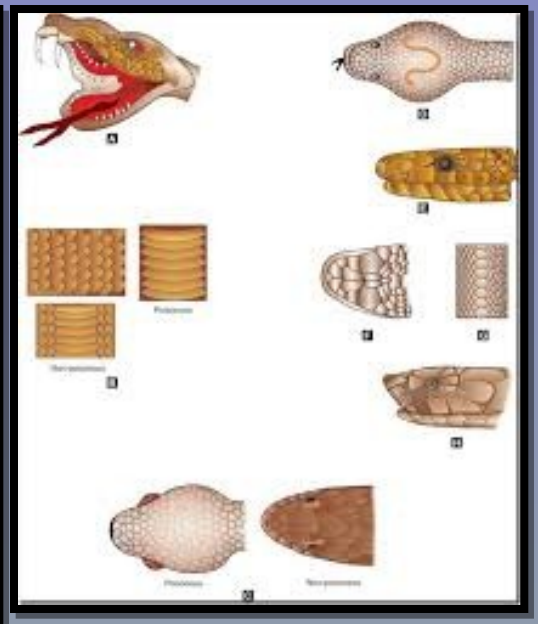
Amniotic Egg

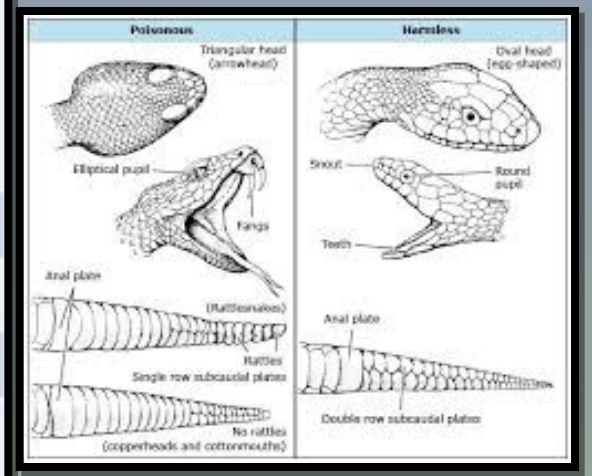


Generalized structure of the amniotic egg. Its membranes—chorion, amnion, yolk sac, and allantois—protect the embryo and provide it with metabolic support.

Difference between poisonous and non-poisonous snakes

Points	Poisonous snakes	Non Poisonous
1. Belly scales	Large : They cover the entire breadth of belly	Small : They never cover
2. Head scales	a) Usually small in vipers b) May be large in pit vipers c) Cobras and Coral snakes where third labial touches the eye and nasal shields d) Kraits ,where there is no pit and the third labial does not touch the nose and eye	Are usually large with exceptions as outlined under poisonous snakes
3. Fangs	Are hollow like hypodermic needle	Short and solid
4. Tail	Compressed	Not markedly compressed
5. Habits	Usually nocturnal	Not so
6. Teeth bite marks	Two fang marks with or without marks of other teeth	Two fang marks with number of small teeth marks





DIFFERENCES BETWEEN COBRA AND VIPER

TRAITS	COBRA	VIPER
1. Body	Usually long and cylindrical	Usually short and stout with narrow neck
2. Head	Small ,seldom broader than body, usually of same width as that of neck, covered with large scales	Larger and broader than body ,usually wider than the neck , covered with small scales
3.Maxillary bones	They carry other teeth beside the poison fangs	They carry only the poison fangs
4. Eye	It has round pupil	It has vertical pupil
5. Fangs.	Placed little anteriorly , grooved short ,fine and fixed	They are canalised ,long , movable and strong,
6. Eggs	Oviparous	Viviparous
7. Tail	Round	Tapering
8.Venom	Neurotoxic mainly	Haemotoxic usually