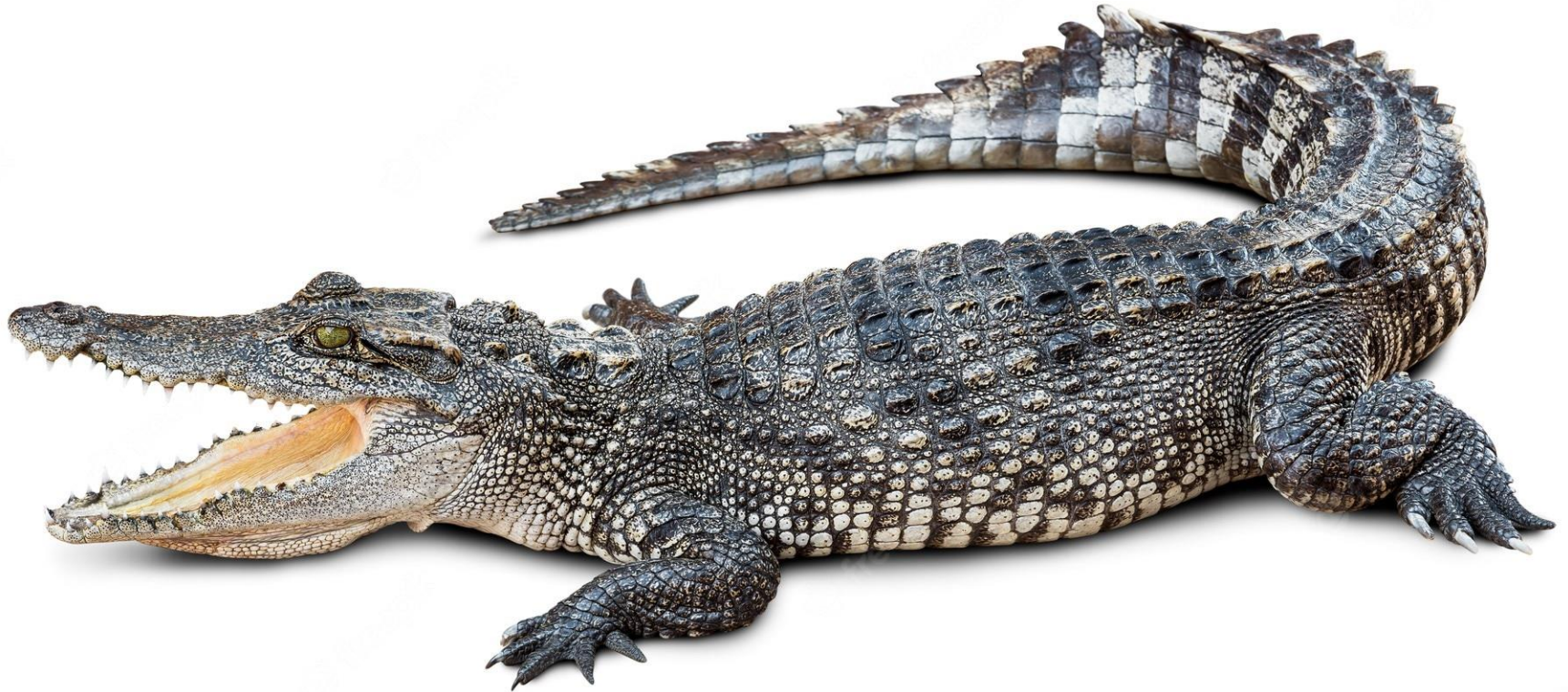


Classification of Reptiles



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Subclass I. Anapsida

Primitive reptiles with a solid skull roof. No temporal openings.

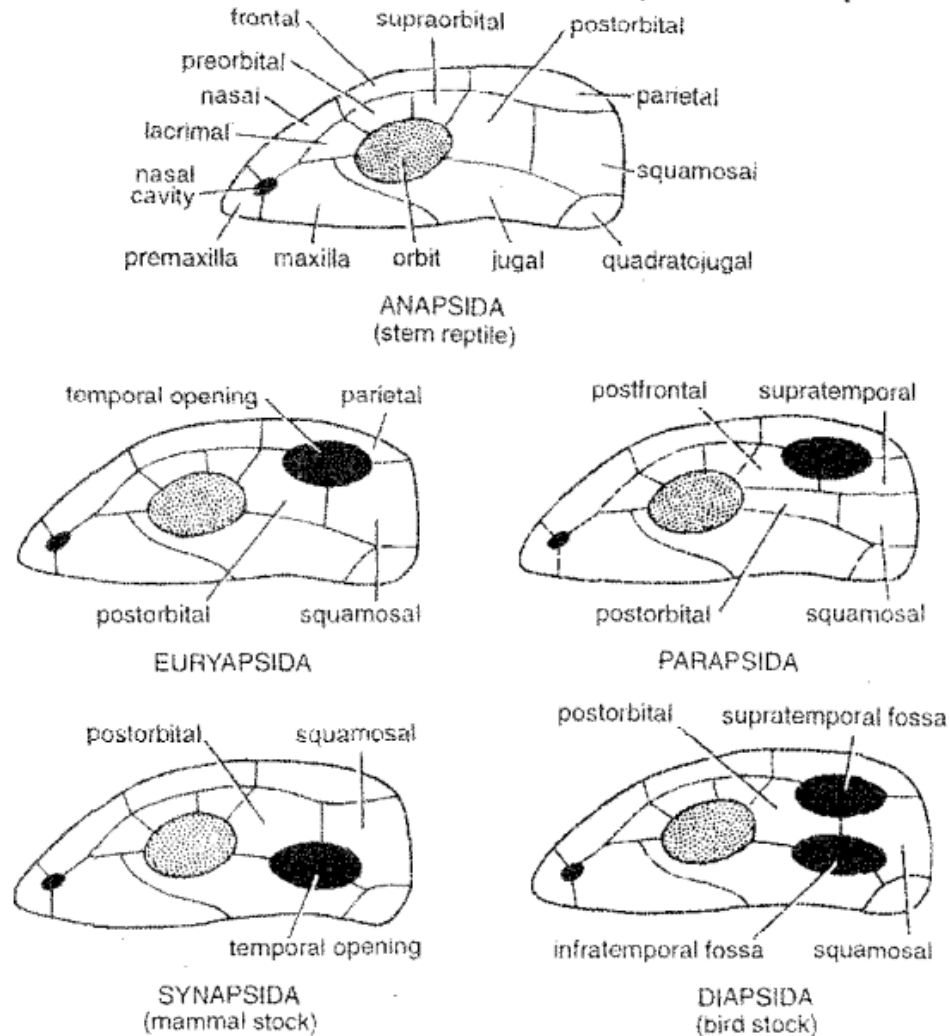


Fig. 1. Five types of skulls in lateral view in 5 subclasses of reptiles.

Order 1. Chelonia or Testudinata

- Body short, broad and oval.
- Limbs clawed and/or webbed, paddle-like.
- Body encased in a firm shell of dorsal carapace and ventral plastron, made of dermal bony plates. Thoracic vertebrae and ribs usually fused to carapace, and without a parietal.
- No sternum is found.
- Teeth absent. Jaws with horny sheaths.
- Cloacal aperture a longitudinal slit.
- Heart incompletely 4-chambered with a partly divided ventricle.
- Examples : *Chelone*, *Testudo*.



Subclass II. Euryapsida (extinct):

Skull with a single dorso-lateral temporal opening on either side, bounded below by postorbital and squamosal bones.

Subclass III. Parapsida (extinct):

Skull with a single dorso-lateral temporal opening on either side bounded below by the supratemporal and postfrontal bones.

Subclass IV. Synapsida (extinct):

Skull with a single lateral temporal opening on either side bounded above by the postorbital and squamosal bones.

Subclass V: Diapsida

Skull with two temporal openings on either side separated by the bar of postorbital and squamosal bones.

Order 2: Rhynchocephalia

- Body small, elongated , lizard like, limbs pentadactyle, clawed and burrowing
- Skin covered by granular scales and mid-dorsal row of spines.
- Vestigeal pineal eye present, Quadrate is fixed.
- Numerous abdominal ribs present.
- Teeth acrodont.
- Cloacal aperture transverse.
- Heart incompletely 4-chambered.
- Example : *Sphenodon punctatum*.



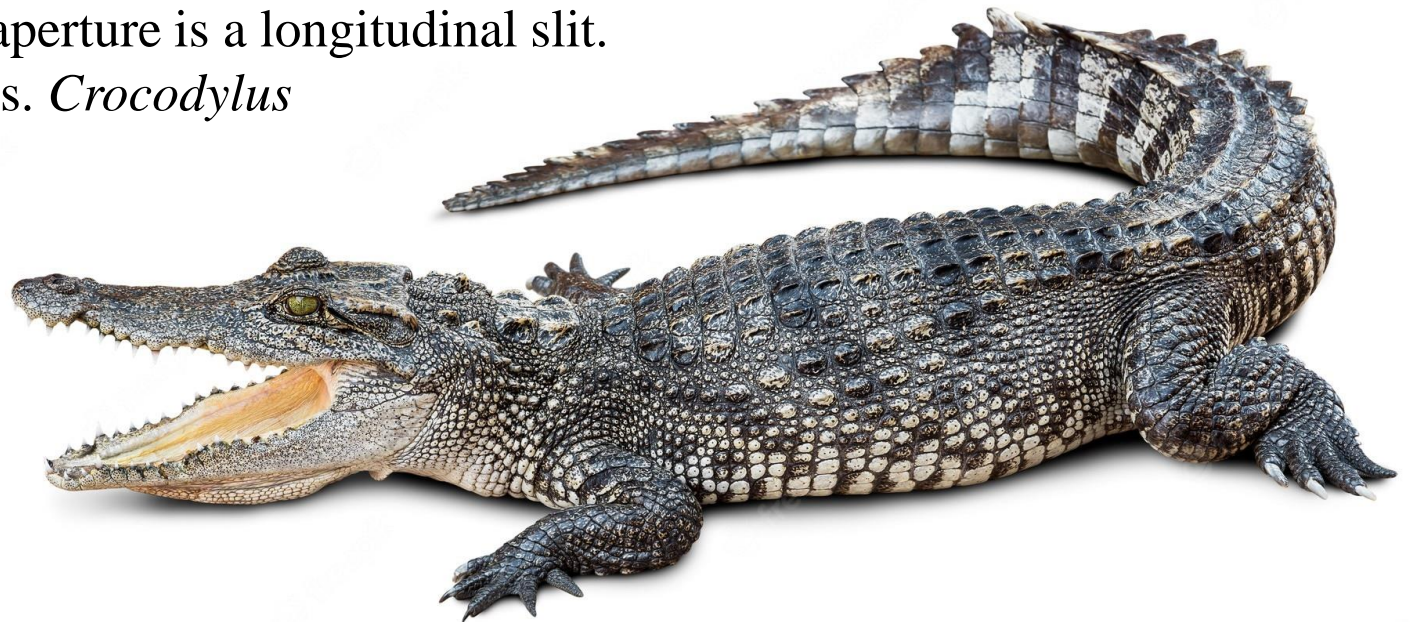
Order 3: Squamata

- Advanced, small to medium, elongated.
- Limbs clawed, absent in snakes and lizards.
- Exoskeleton of horny epidermal scales, shields and spines.
- Skull diapsid. Quadrate movable.
- Heart incompletely 4-chambered.
- Cloacal aperture is transverse.
- Paired organ of Jacobson present for olfaction.
- Example- *Varanus*, *Naja*



Order 4: Crocodylia

- Large-sized, carnivorous and aquatic reptiles.
- Tail long, strong and laterally compressed.
- Limbs 'short but powerful, clawed and webbed.
- Skin thick with scales bony plates and scutes.
- Skull diapsid. Quadrate immovable.
- Abdominal ribs present.
- Teeth numerous, thecodont, lodged in sockets.
- Heart completely 4-chambered.
- Cloacal aperture is a longitudinal slit.
- Examples. *Crocodylus*



Thank you!

