

26.2 Reptiles

KEY CONCEPT

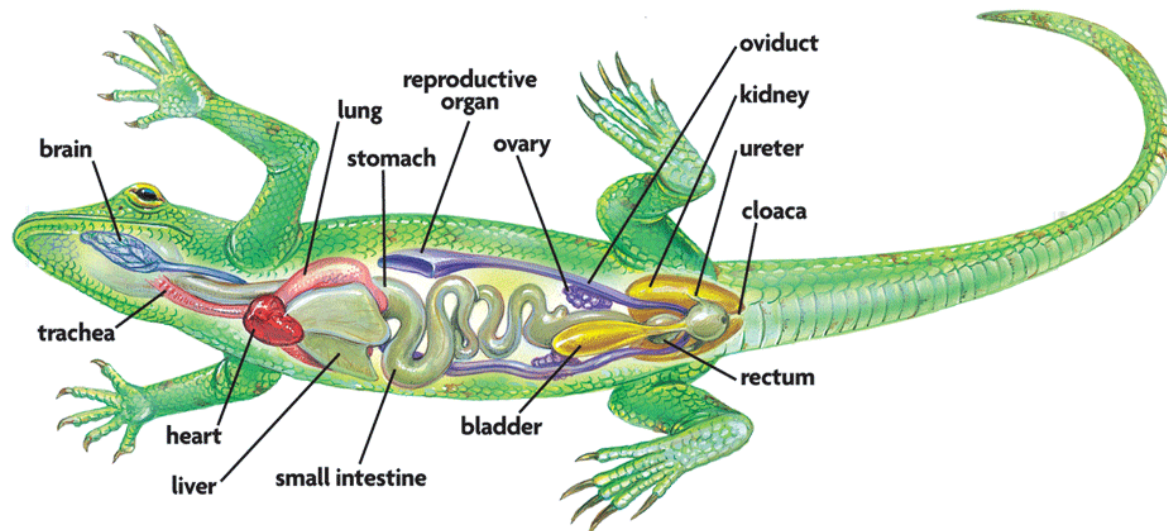
Reptiles were the first amniotes.



26.2 Reptiles

▶ Reptiles are a diverse group of amniotes.

- Reptiles share several characteristics.
 - ectotherms
 - covered with dry scales
 - reproduce by laying or retaining amniotic eggs
 - three-chambered heart
 - cloaca



26.2 Reptiles

- Reptiles have two reproductive strategies.
 - Oviparous reptiles deposit eggs into an external nest.
 - Viviparous reptiles retain eggs and give birth to live offspring.



26.2 Reptiles

▶ Reptiles have been evolving for millions of years.

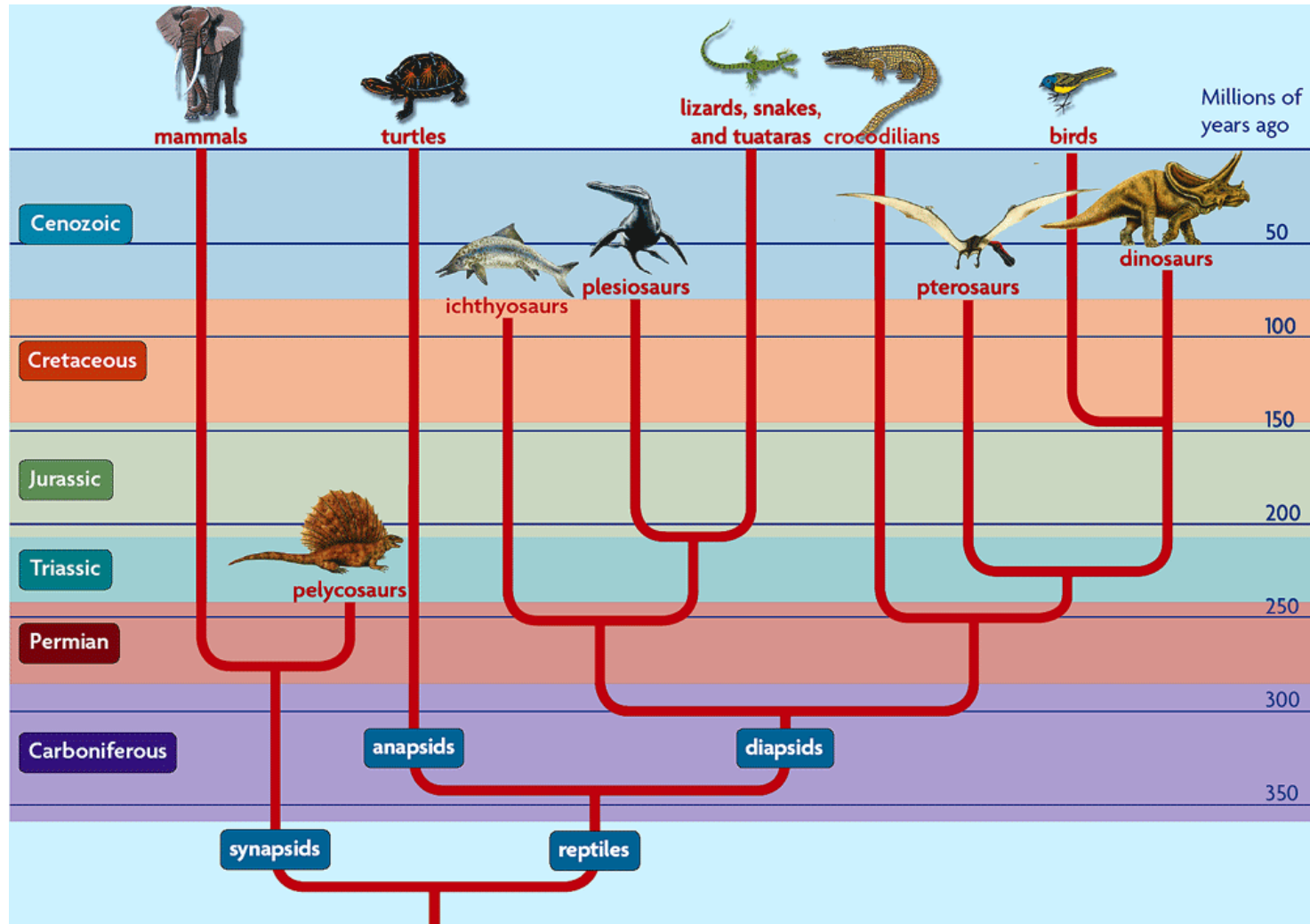
- Over time, amniotes evolved into three different groups.
 - synapsids
 - anapsids
 - diapsids

AMNIOTE SKULL TYPES		
SKULL TYPE	NUMBER OF HOLES	EXAMPLE
Anapsid	0	turtles
Synapsid	1	mammals
Diapsid	2	birds, lizards, crocodilians



26.2 Reptiles

- The diversity of ancient reptiles led to the evolution of modern reptiles, birds, and mammals.



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- ▶ **There are four modern groups of reptiles.**
 - Turtles, tortoises, and terrapins are the remaining anapsids.
 - bony shell encases body
 - 200 species



26.2 Reptiles

- Sphenodonts are closely related to lizards.
 - diapsids
 - primitive characteristics
 - two species

Tuatara



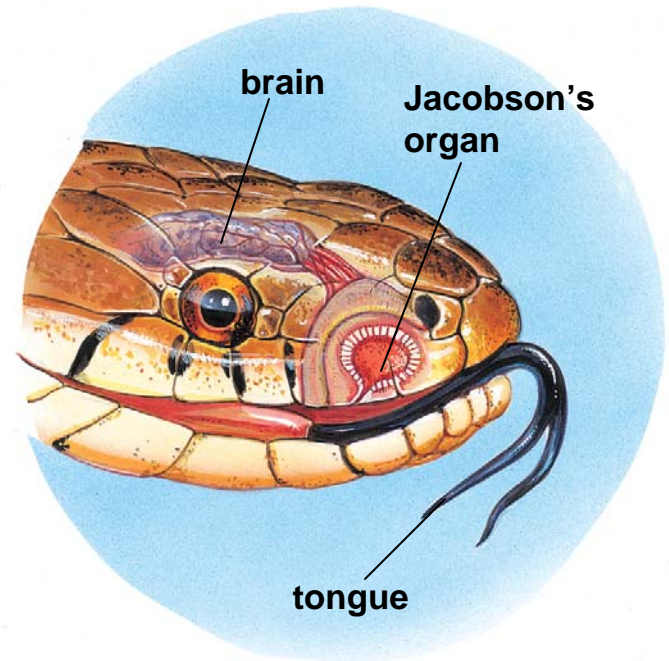
Sphenodon guntheri



Sphenodon punctatus

26.2 Reptiles

- Snakes and lizards are very closely related and share a number of features.
 - diapsids
 - shed skin at regular intervals
 - flexible skull
 - Jacobson's organ



26.2 Reptiles

- Both alligators and crocodiles are members of the reptilian order **Crocodylia**: Family Alligatoridae and Family Crocodylidae
- Crocodylians are more closely related to birds than other diapsids.
 - diapsids
 - semi-aquatic predators
 - 23 species



Crocodile

All alligators are crocodiles, but not all crocodiles are alligators.



Alligator