

Tetrapoda

↳ 2 pair of pentadactylous limbs, Bones, Gills in embryonic stage
Middle ear present, 3-4 chambered heart & double circulation

amphibia

head trunk tail, smooth, moist skin, poikilotherm, two nostrils
↓
Dichrynos

skull & two occipital condyles = dicondylic

3-chambered heart, RBC, Biconcave, oval, nucleated

digits & No nails, claws. Teeth = pleurodont, homodont, polyphyodont

10 pair cranial nerves, 1 pair kidney, hibernation/aestivation,

lateral line sensory system vertebrae procoelus type → centrum

Concave anterior convex posterior

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external fertilization, extra embryonic memb absent
 ↳ anamniote group

Both renal & hepatic portal system present
 cleavage holoblastic unequal

Tadpole → frog axolotl larva → salamander

	Gymnophiona/ Apoda	Caudata / urodela	Anura / salientia
Body	worm like	head trunk tail	tail absent
limb	limbless	2 pairs	2 pairs hindlimbs are webbed
copulatory organs	⊕nt	⊖	⊖
eye & middle ear	⊖	⊕	⊕
Tail	⊖	⊕	⊖
	Dermal bones ⊕nt Parental care found	Neoteny found	have power voice

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Ichthyophis - blind worm
Gymnophis

Salamandre

↳ have aradotel larvae

Proteus - Cave salamander

Necturus - mud puppy

↳ permanent
neoteny

amphiurome ↳ Congo eel

ambystoma - Tiger salamander

Siren - mud eel

Triton - crested newts

↓
lizard like
animals

Bufo = common toad

hyla = tree frog

Rana tigrina

Rhacophorus

Alytes = midwife toad

pipe americana

↳ Surinam toad

↓
have 2° viviparity

Rana goliath = largest
frog

Bombinator ↳ firebelly
toad

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