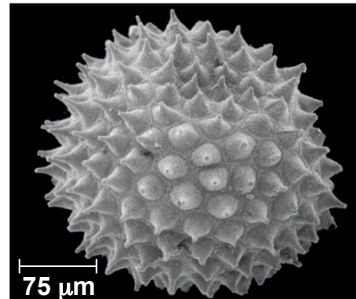
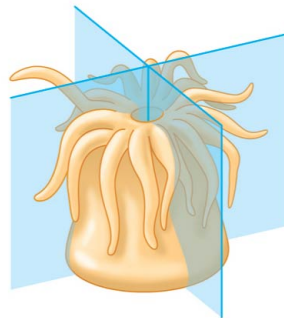


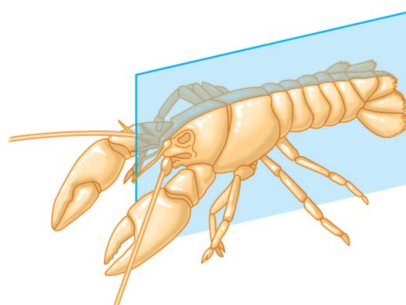
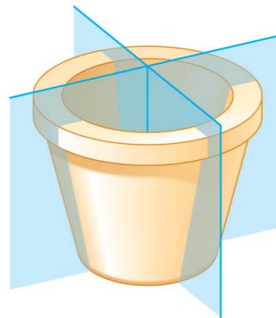
(a) *Valeria* (800 mya):
roughly spherical, no
structural defenses,
soft-bodied



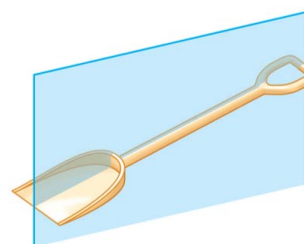
(b) Spiny acritarch
(575 mya): about five
times larger than
Valeria and covered in
hard spines

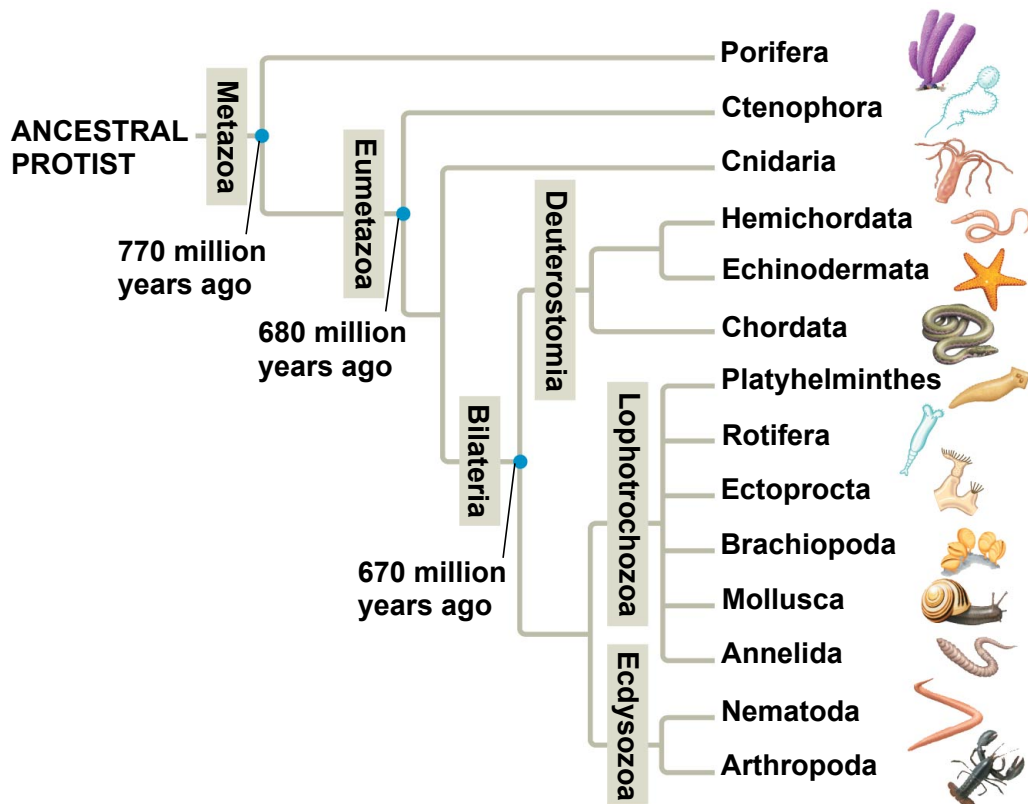
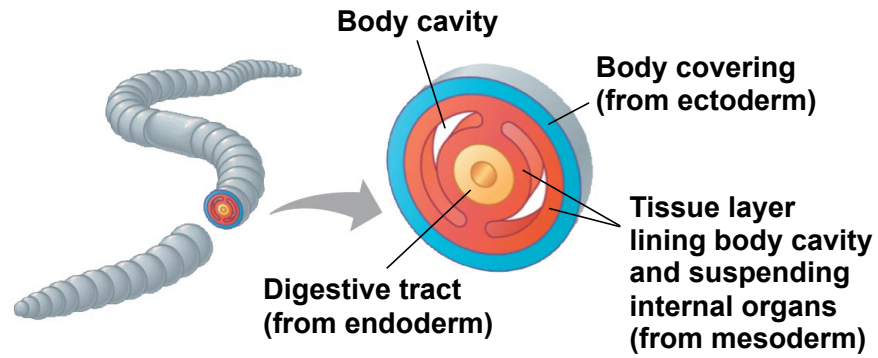


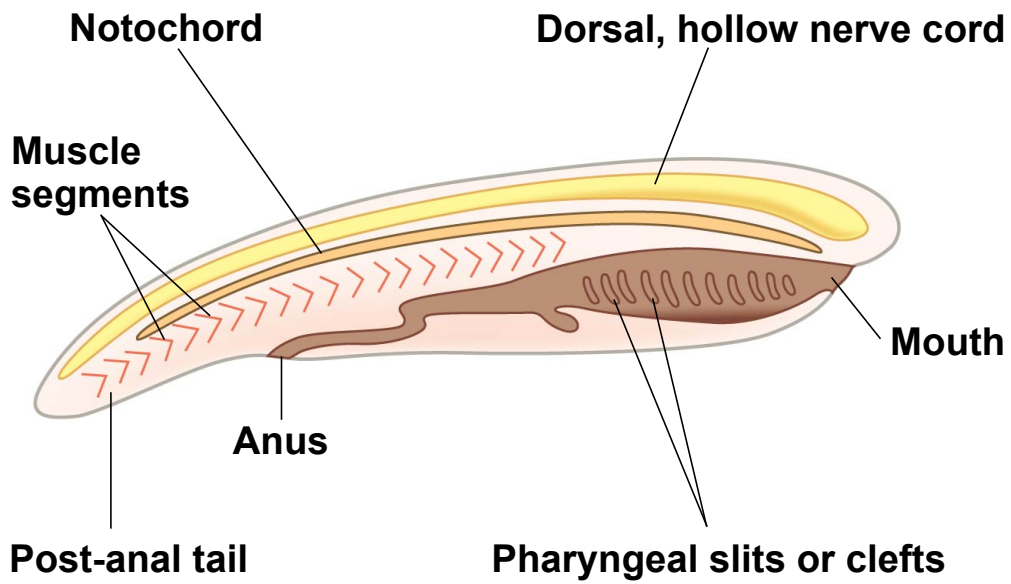
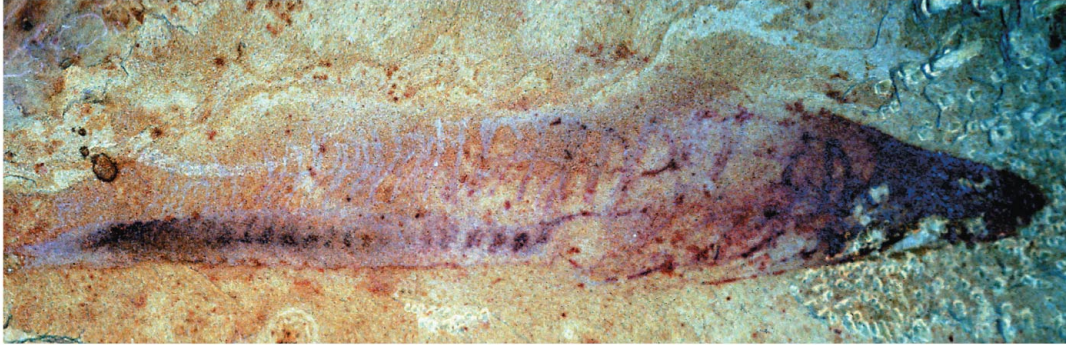
(a) Radial symmetry



(b) Bilateral symmetry





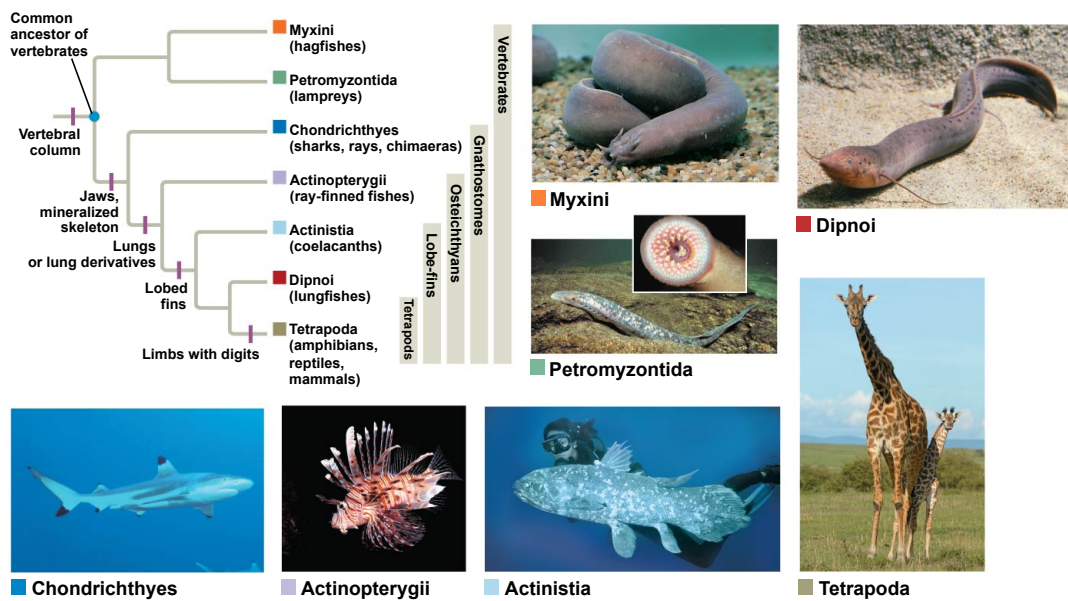


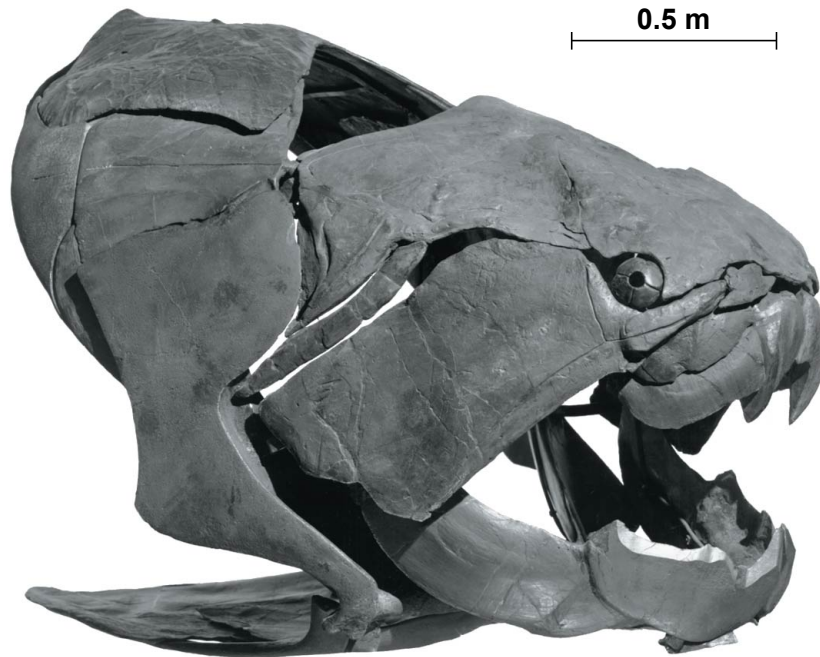


(a) Lancelet









(b) Tunicate





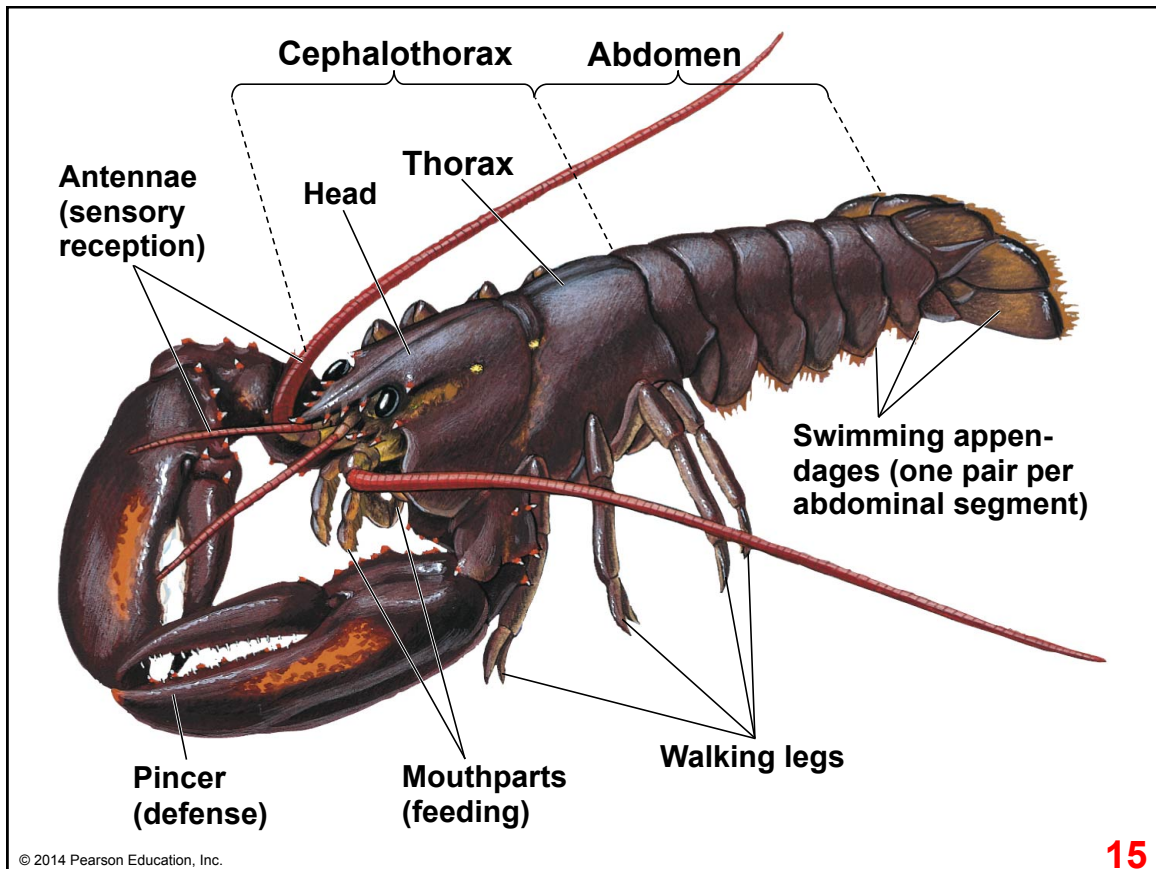
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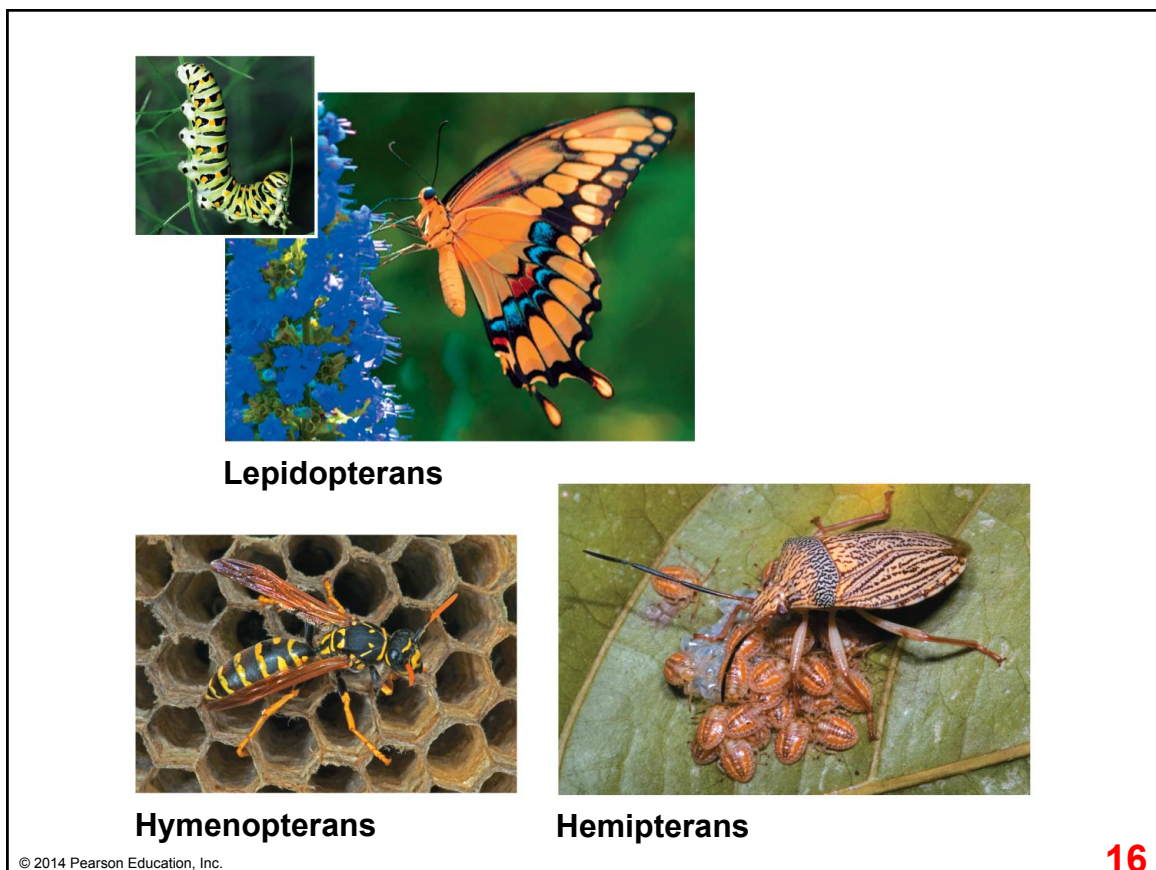
		GREEN ALGA	MARINE CRUSTACEAN	AQUATIC LOBE-FIN
AQUATIC ANCESTOR				
CHARACTER	Anchoring structure	Derived (roots)	N/A	N/A
	Support structure	Derived (lignin/stems)	Ancestral	Ancestral (skeletal system) Derived (limbs)
	Internal transport	Derived (vascular system)	Ancestral	Ancestral
	Muscle/ nerve cells	N/A	Ancestral	Ancestral
	Protection against desiccation	Derived (cuticle)	Ancestral	Derived (amniotic egg/scales)
	Gas exchange	Derived (stomata)	Derived (tracheal system)	Ancestral
TERRESTRIAL ORGANISM				
		LAND PLANTS	INSECTS	TERRESTRIAL VERTEBRATES

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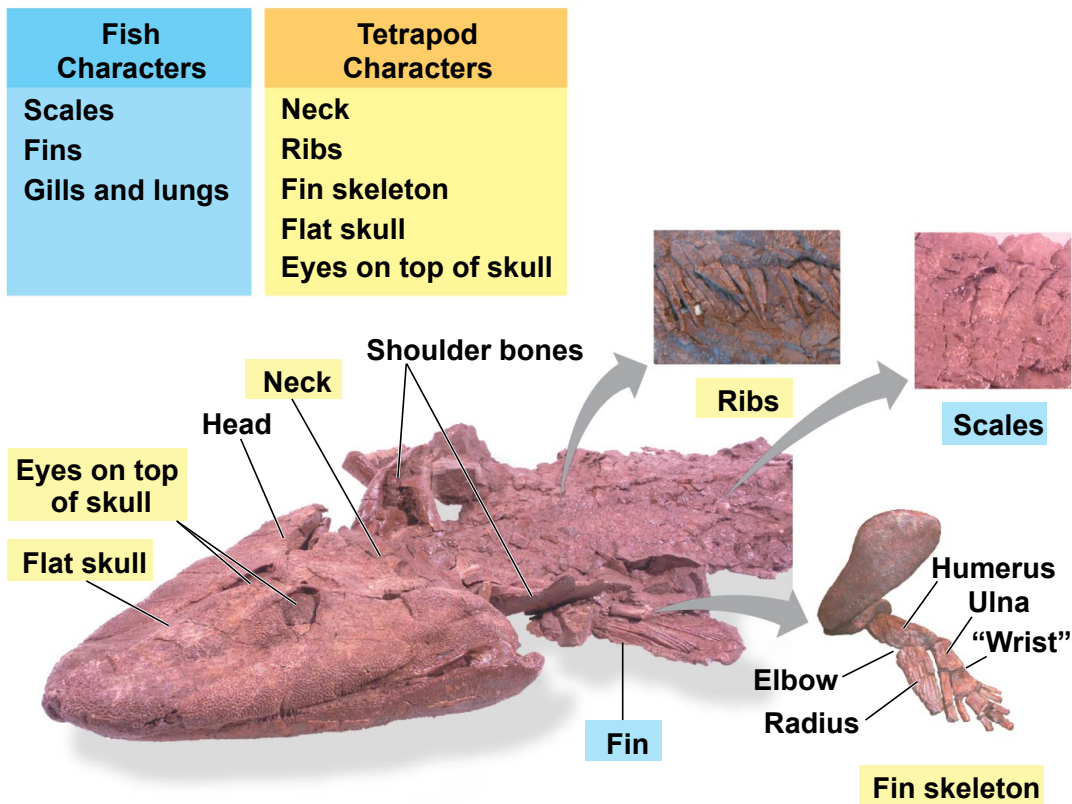
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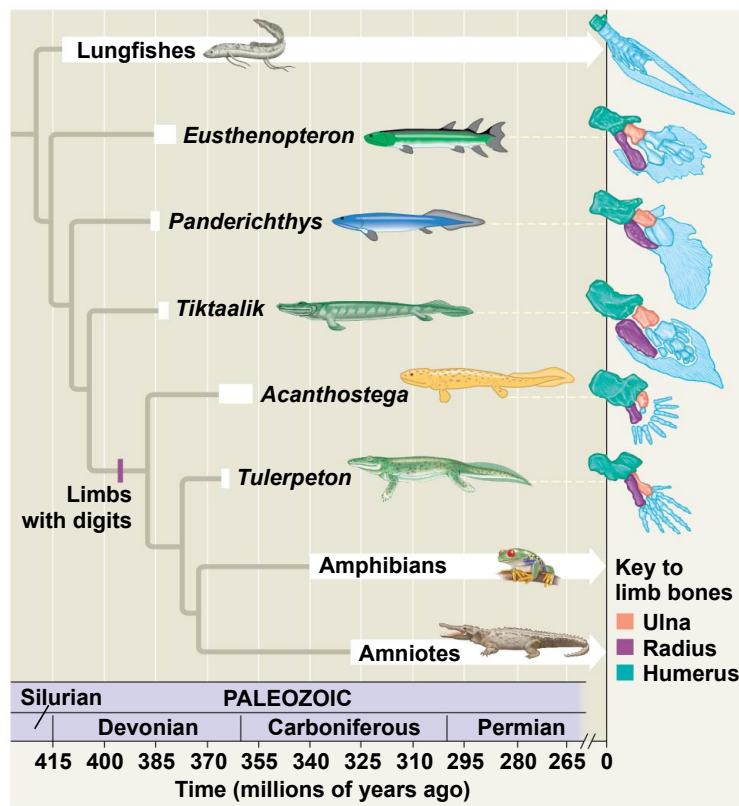


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▲ Salamanders retain their tails as adults.



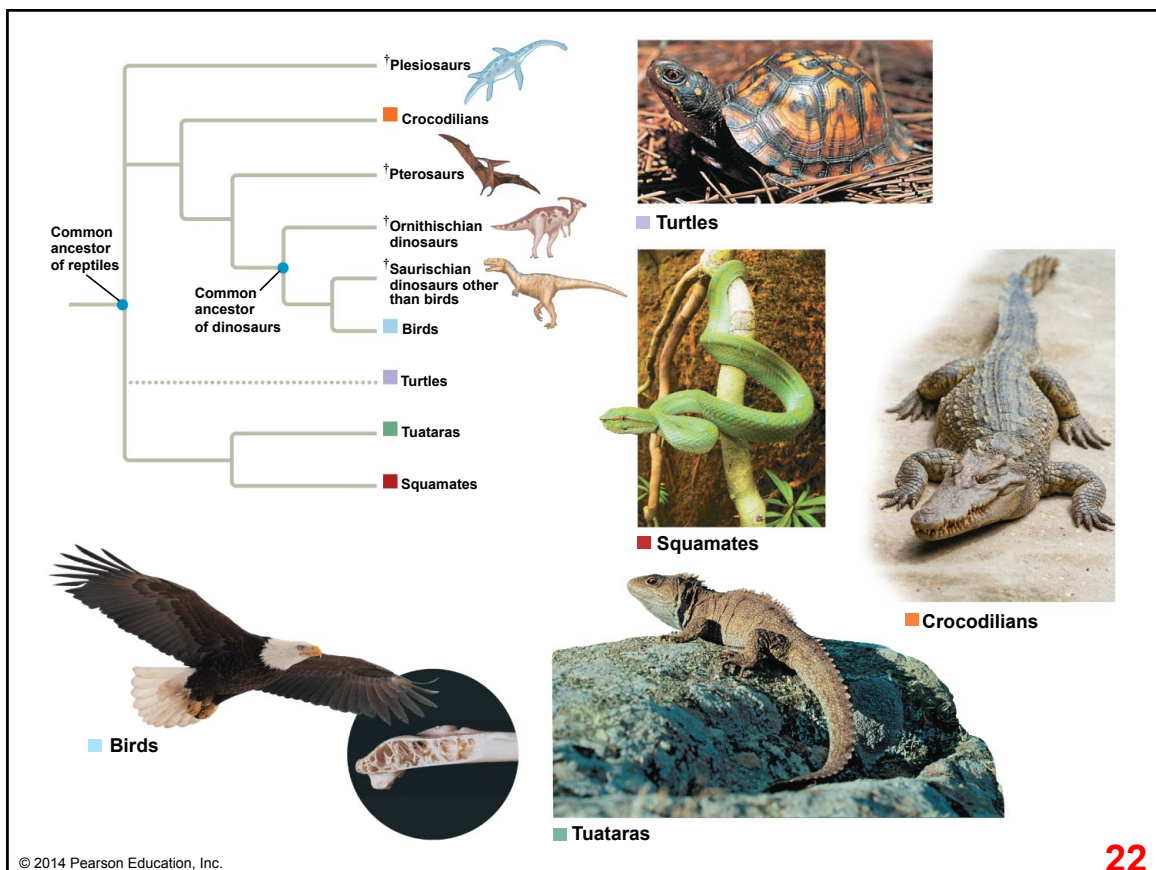
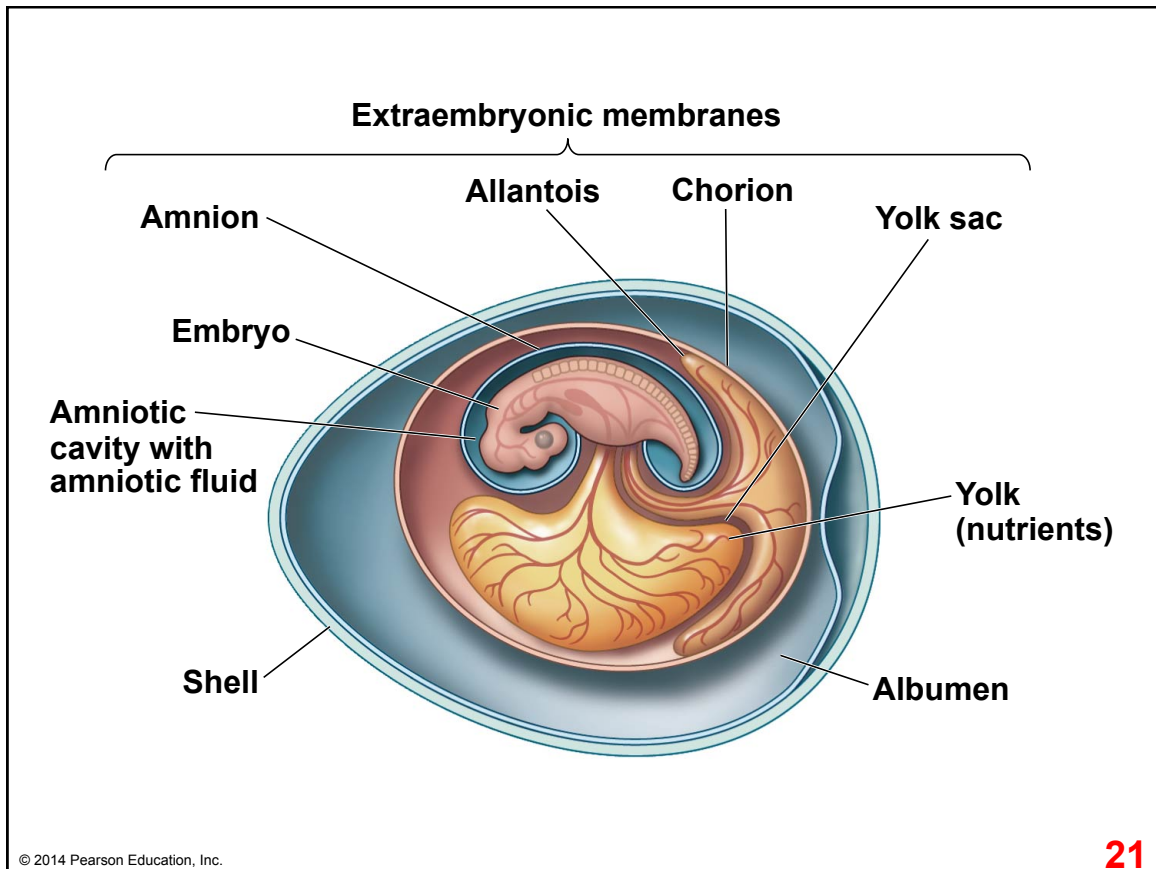
▲ Caecilians have no legs and are mainly burrowing animals.



◀ Frogs and toads lack tails as adults.

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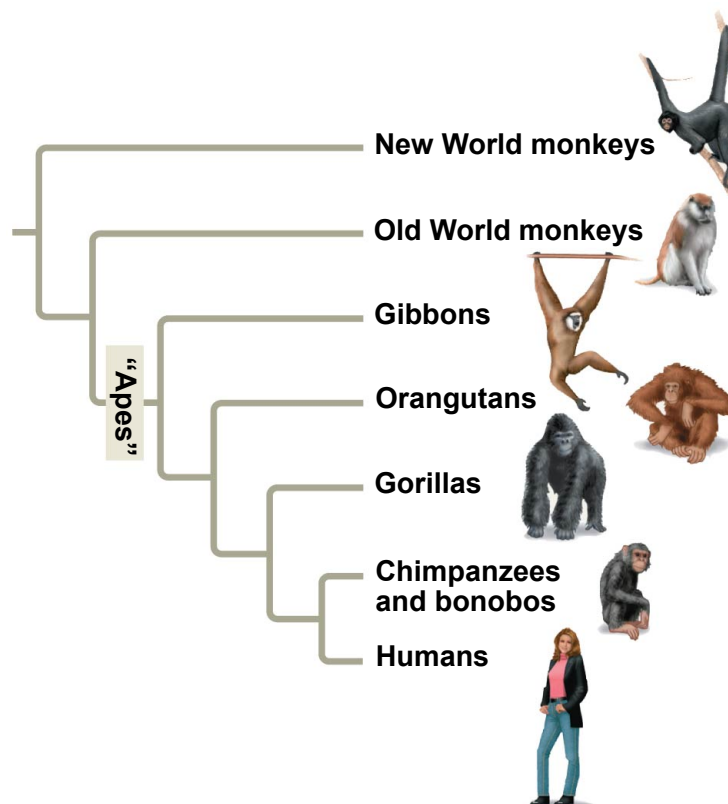
Monotremes

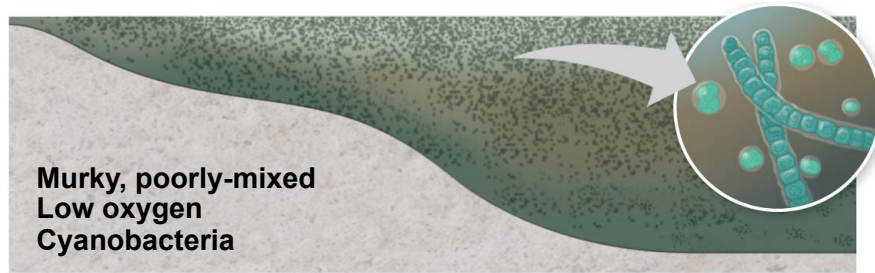


Marsupials

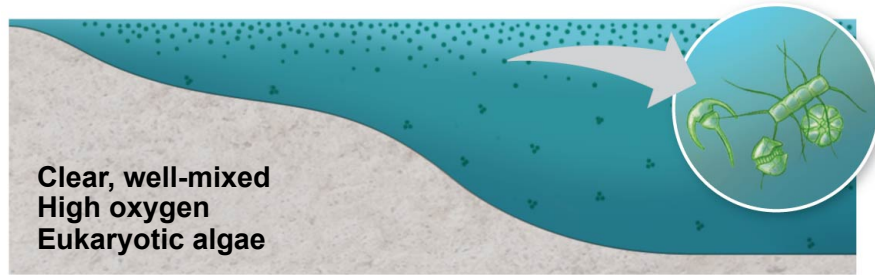


Eutherians

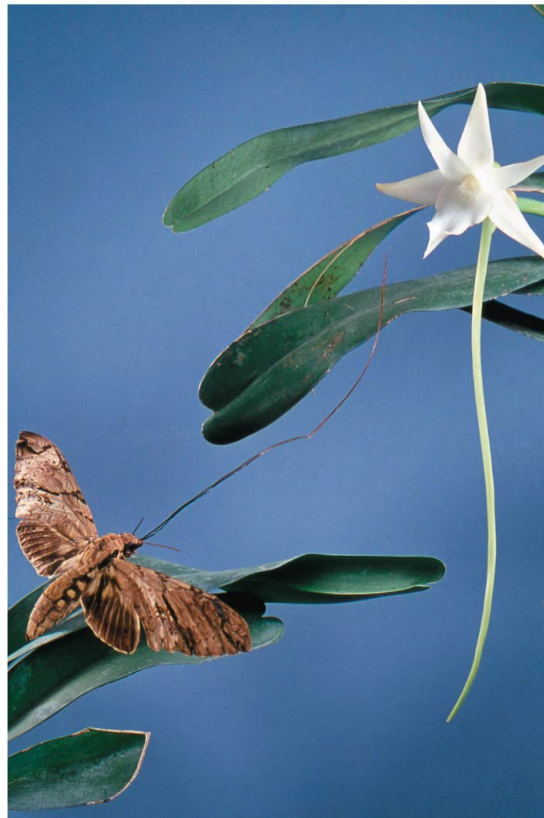


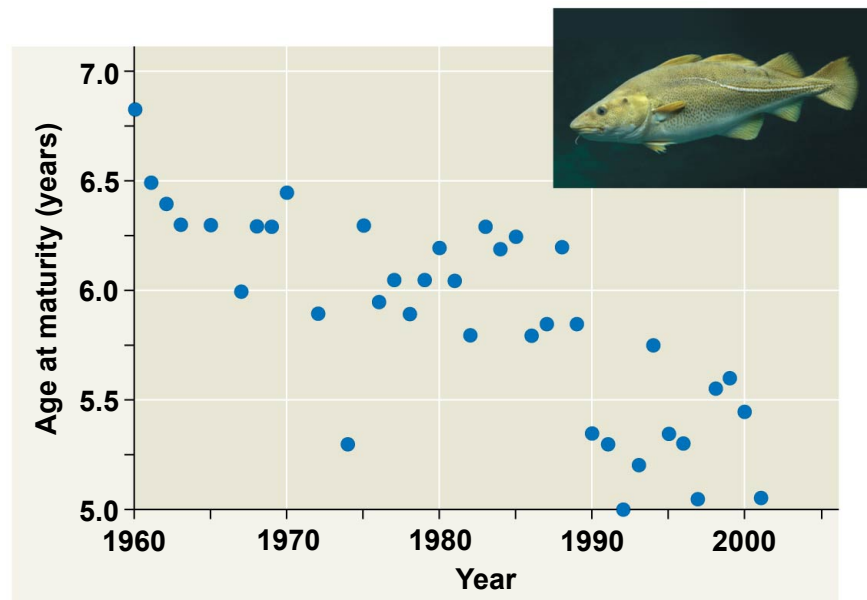


(a) Ocean conditions before 600 mya



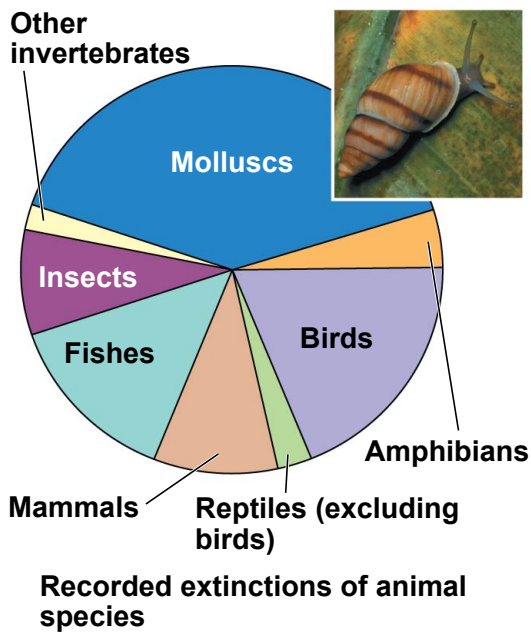
(b) Changes to ocean conditions by 530 mya





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An endangered Pacific island land snail, *Partula suturalis*



Workers on a mound of pearl mussels killed to make buttons (ca. 1919)

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