

③ Amphibians

What You'll Learn:

Describe the adaptations amphibians have for living in water and on land.

List the kinds of amphibians and the characteristics of each.

Explain how amphibians reproduce and develop.

Amphibian Characteristics

*Amphibios is Greek for "double life".



*They are ectotherms that spend part of their life in water and on land.



Respiration

*Most have lungs.

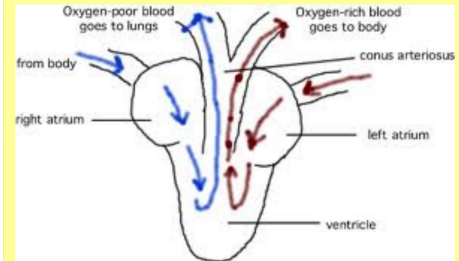
*Thin moist skin that is scaleless

*Can exchange oxygen and carbon dioxide through skin.



Circulation

*Three chambered heart.



Reproduction

*Eggs must be laid or develop in water.

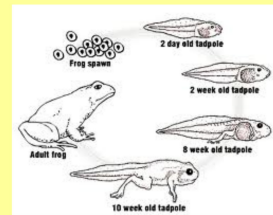


Development

*Amphibians go through metamorphosis.

*Tadpoles have fins, gills, and two chambered heart.

*As tadpoles grow they develop legs, lungs and three chambered heart.



Frogs and Toads

*Strong hind legs for swimming, bulging eyes and nostrils on top of head are adaptations for living in water.

*Tympanic membranes work like the eardrum and allow them to hear.

*Tongue is attached to the front of the mouth and flips out to catch prey.



Salamander

*Often mistaken for lizards because of similar appearance.



*Short legs that appear to stick straight out from the sides

Importance of Amphibians

*Control insect population, source of food for other animals, and are being studied to learn about nervous system

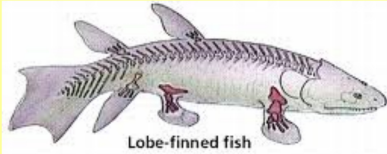


Biological Indicators

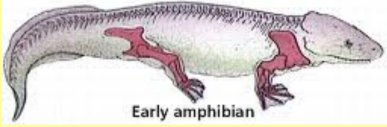
*Thin skin makes them susceptible to pollutants.

*Their overall health is an indicator for the health of the environment





Lobe-finned fish



Early amphibian