

REPRODUCTION IN REPTILES AND AMPHIBIANS

REPTILES:

Reptiles reproduce by internal fertilization. The male fertilizes the female while her eggs are still inside of her body.

Most, but not all, reptiles lay eggs. Pit vipers (rattlesnake, copperhead, cottonmouth) do not lay eggs, they bear their young live.

The sex of some reptiles, especially turtles and alligators, is temperature dependent. This means that whether a young reptile is a female or a male when it hatches is determined by the nest temperature during the last part of the incubation period.

Some reptiles lay eggs but then abandon the nest. The young are left to survive on their own. One reptile that does not abandon its nest is the Alligator, who will defend both its nest and its newborn young.

Unlike amphibians, reptiles do not develop in stages. When reptiles are born they look like the adult with the only difference being color patterns.

Oviparous – egg laying; produces eggs which hatch after leaving the body (rat snakes)

Ovoviviparous – egg retention: produces eggs with enclosing membranes that are hatched within the female so that the young are born alive (garter snake, water snakes)

Viviparous – bearing live young (rattlesnakes, pit vipers, coral snake)

AMPHIBIANS:

Amphibians reproduce by external fertilization.

The female lays eggs in water or a very moist damp environment then the male fertilizes the eggs. The eggs are then left to develop, usually in the bottom of a pond or river, where the current is slow so as not to disturb them.

Development of young amphibians is usually in stages where the young first have gills and then develop lungs later - such as in egg, tadpole, tadpole with legs, frog.

Amphibians

1. Lay eggs in water or in moist places on land.
2. Have metamorphosis - going thru several changes from egg to air breathing adult.
3. No scales.
4. Larvae breathe by means of gills for a time.

Reptiles

1. Never lay eggs in water; only on land.
2. Young hatched or born with the form of parent.
3. Have Scales.
4. No larval stage and hence no gills present.