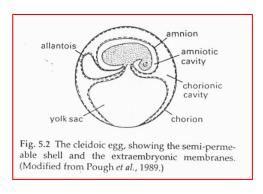
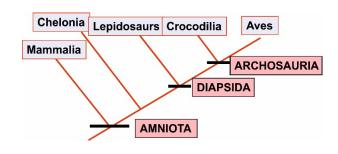
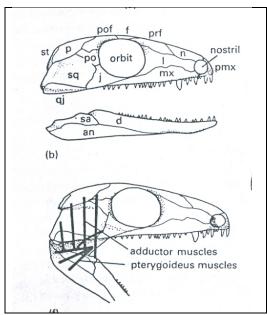
CLASS REPTILIA

- ✓ Reptiles were the first vertebrates that became completely independent of water for laying their eggs.
- ✓ Reptiles, mammals and birds belong to the clade called AMNIOTA as all these groups are characterized by the presence of an extra-embryonic membrane called Amnion in their eggs, which helped in the retention of water, moisture and nutrients.





- ✓ The earliest reptiles are called *Hylonomus* and *Paleothyris*, which were recovered from the Carbonifferous of Nova Scotia, Canada.
- ✓ All reptiles and higher vertebrates (mammals and birds) are characterized by a transverse flange of the pterygoid, from which evolved the pterygoideus muscles, a second set of jaw-closing muscles along with the adductor muscles (the first set), which helped in strengthening the closing of the jaws or snapping action of the jaws. This contrasts with that of the amphibians, where pterygoideus muscles are not present.



- ✓ The Class Reptilia is subdivided into four subclasses, though Testudinata is often clubbed with Anapsida.
- 1. Testudinata
- 2. Anapsida
- 3. Diapsida
- 4. Synapsida

(1). TESTUDINATA

The group Testudinata includes many fossil forms and present day turtles and tortoises. This group is characterized by -(1), openings developed on the posterior or back side of the skull through which the jaw muscles extended, and (2), appearance of beak in place of teeth. Testudinata may be subdivided into two groups based on the way the head is retracted inside the shell during danger:

(a), Cryptodires:

Vertical movement of the neck

(b), Pleurodires:

Horizontal movement of the neck

