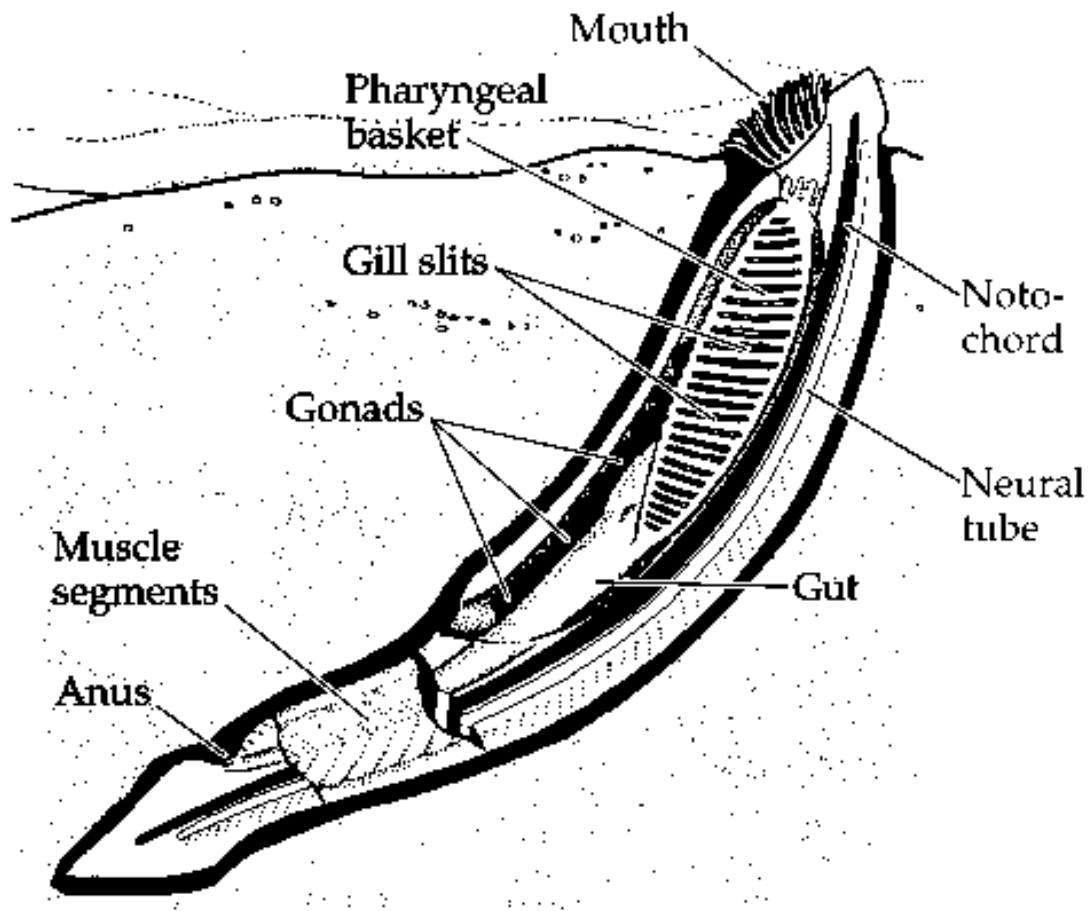
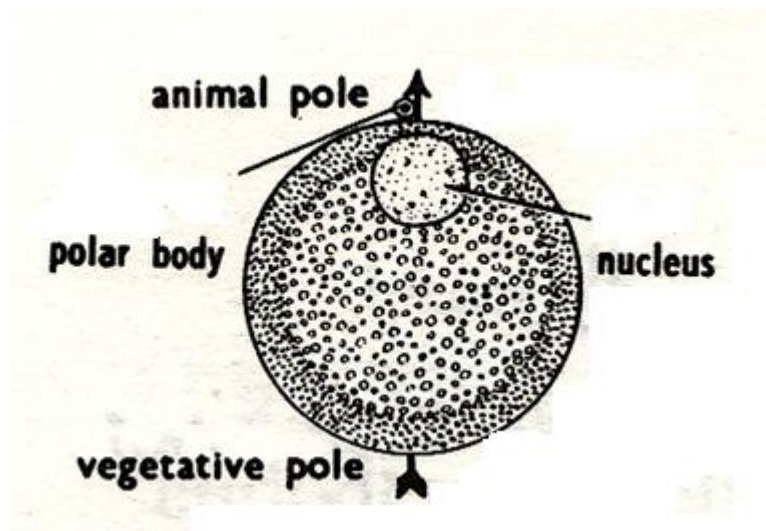


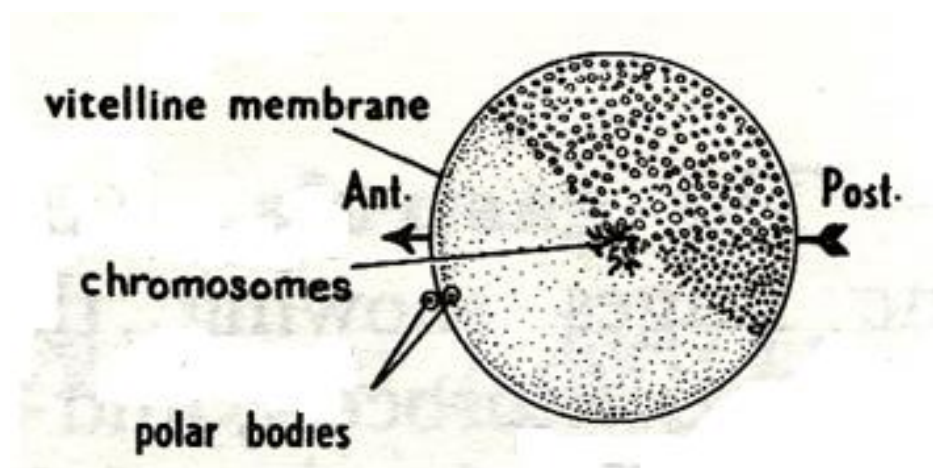
Early development stages of Amphioxus



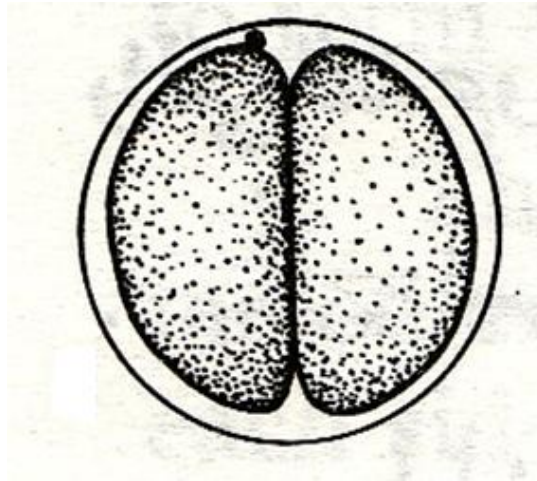
Amphioxuses are the modern representatives of the subphylum Cephalochordata. They are usually found buried in sand in shallow parts of tropical seas. In common with vertebrates, *Amphioxus* has a nerve tube running along the back, pharyngeal slits and a tail that runs past the anus. Also like vertebrates, the muscles are arranged in blocks. Unlike vertebrates, the dorsal nerve cord is not protected by bone its only notochord. It also has oral cirri that hang in front of the mouth and act as sensory devices and as a filter for the water passing into the body. Male and female amphioxus are identical in outward appearance and differ internally only in the nature of the gonads.



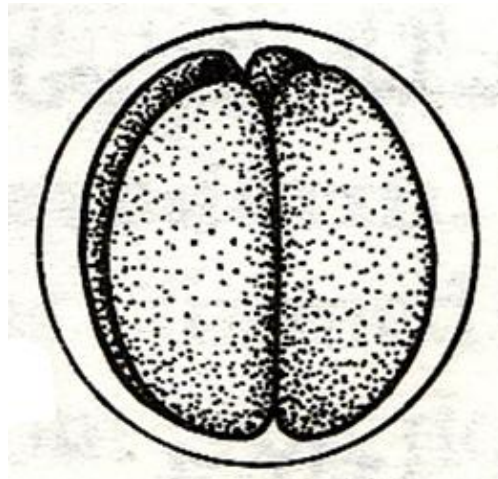
Whole mount of nonfertilized egg of Amphioxus



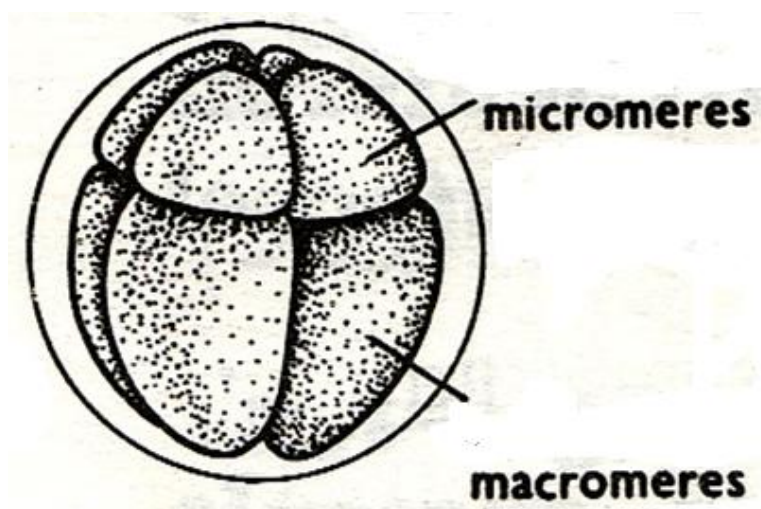
Whole mount of fertilized egg of Amphioxus



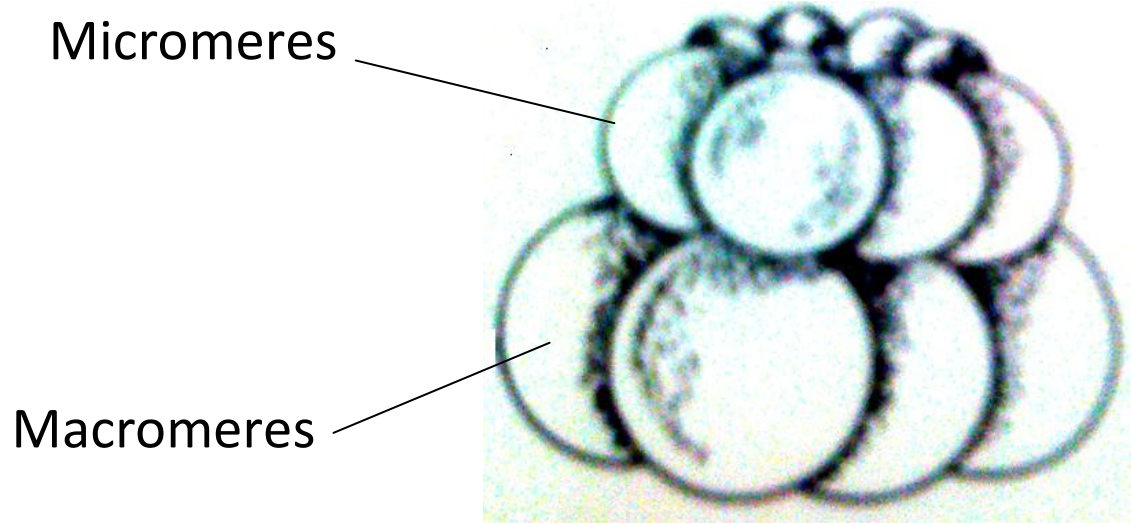
Whole mount of 2- Blastomeres stage of Amphioxus



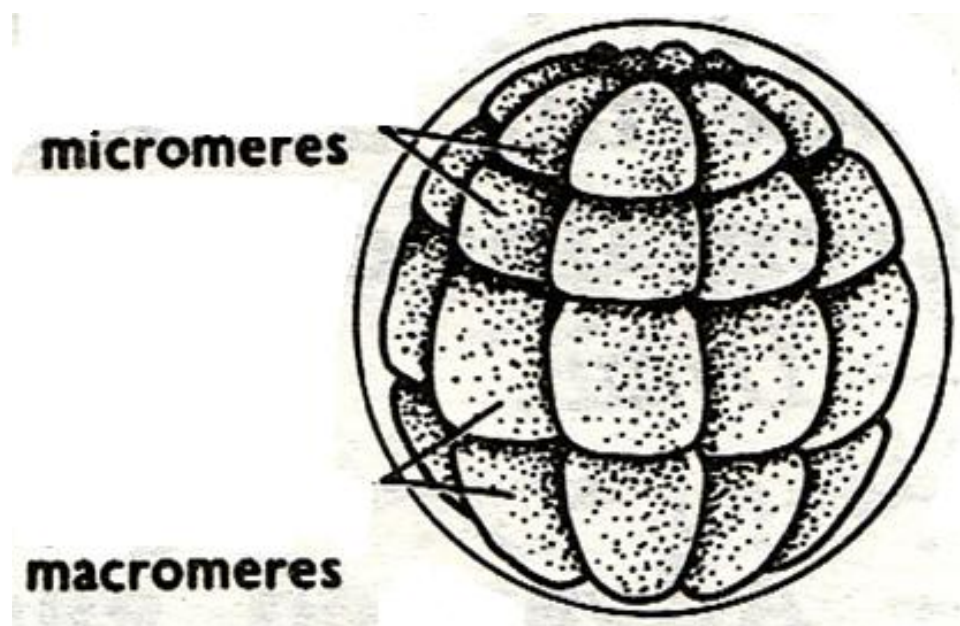
Whole mount of 4 - Blastomeres stage of Amphioxus



Whole mount of 8 - Blastomeres stage of Amphioxus

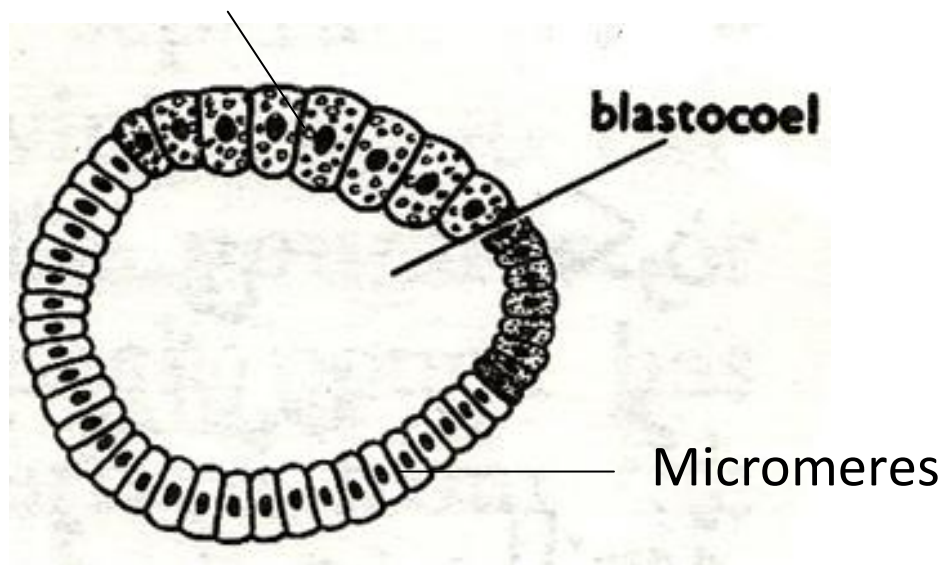


Whole mount of 16- Blastomeres stage of Amphioxus

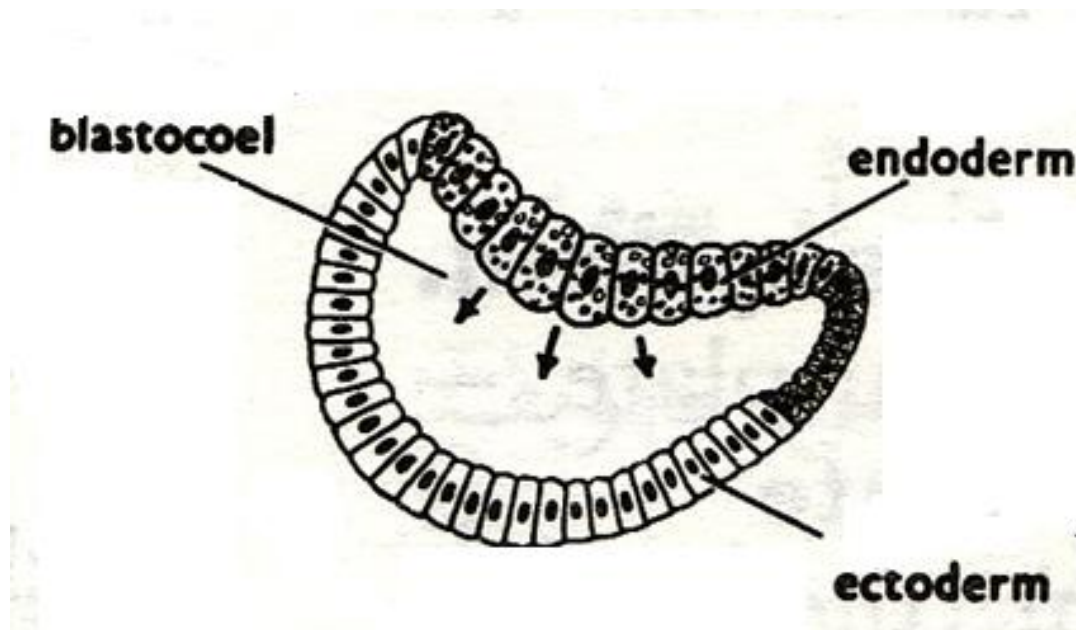


Whole mount of 32 - Blastomeres stage of Amphioxus

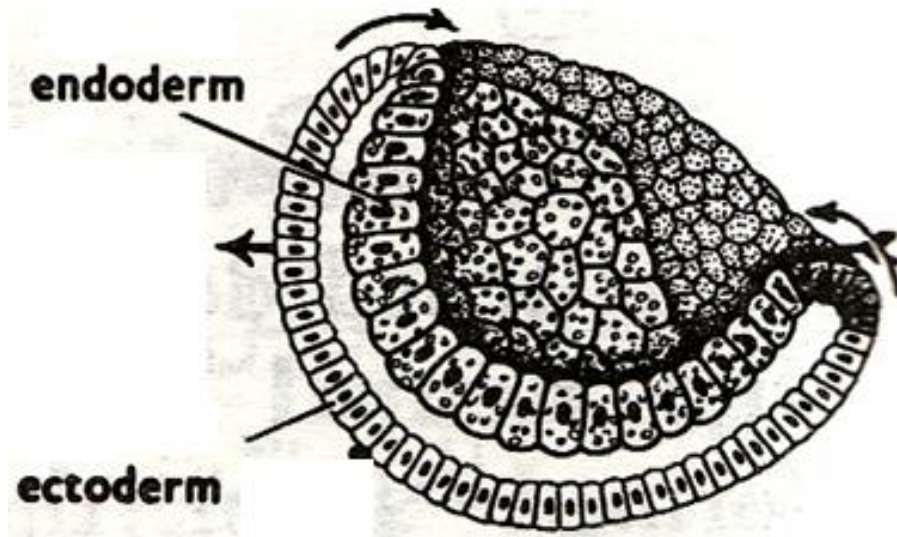
Macromeres



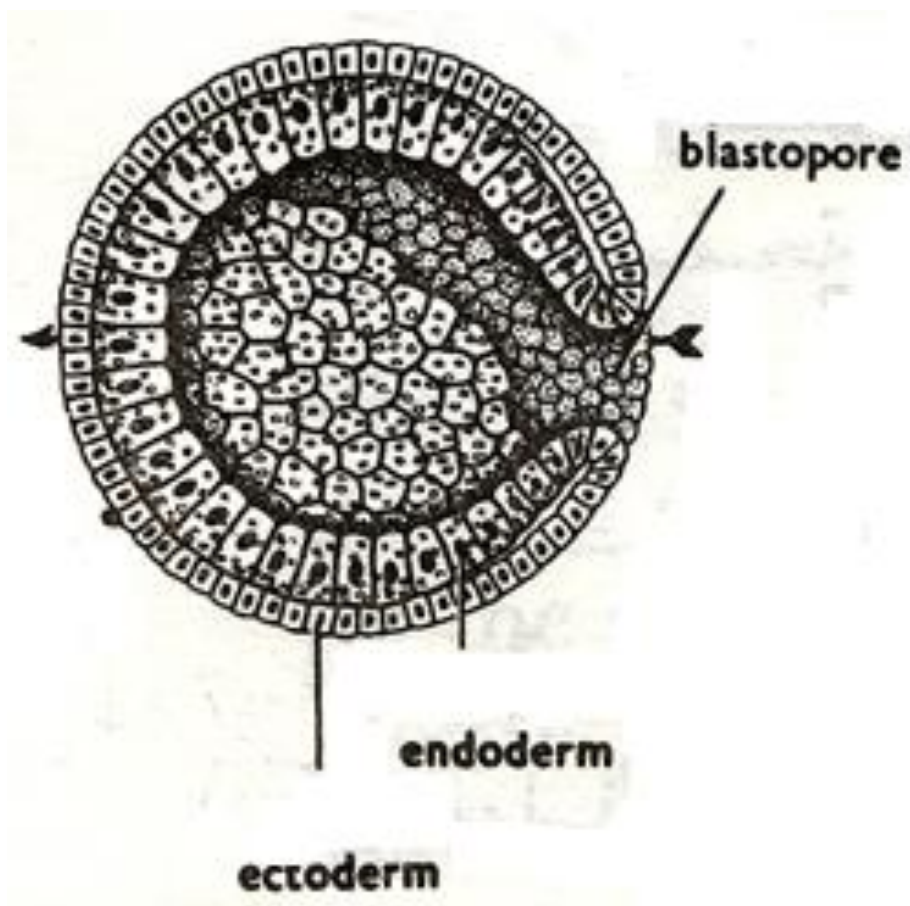
Cross section of blastula stage of Amphioxus



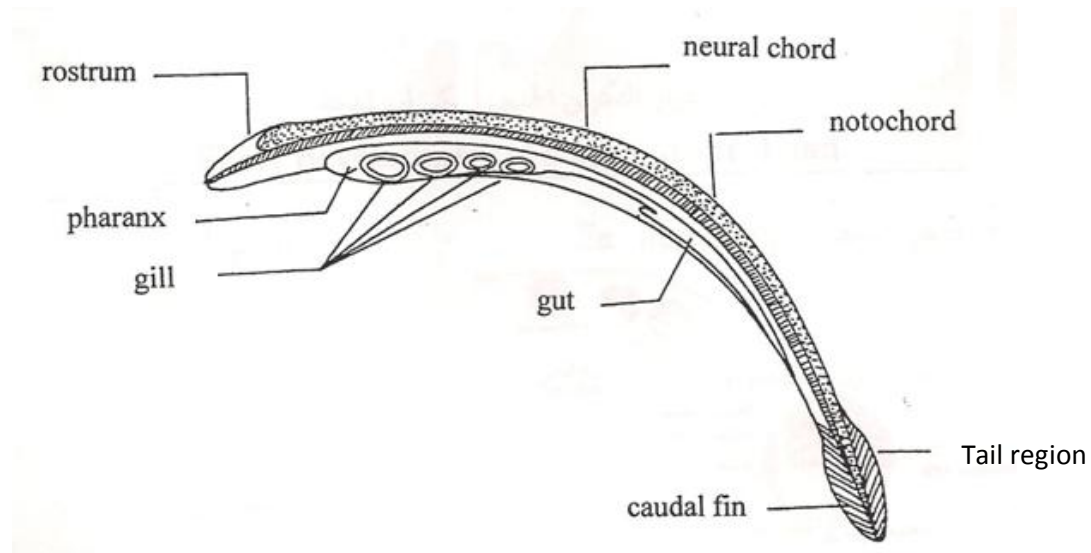
Cross section of Amphioxus shows the gastrulation



Cross section of early gastrula stage of Amphioxus



Cross section of late gastrula stage of Amphioxus



Early Larvae stage of Amphioxus

What do you have to do today?

1. Identify the adult stage of amphioxus
2. Identify early and late stage of amphioxus larvae
3. Identify early development stages of Amphioxus
(fertilized egg , 2-blastomeres , 4-blastomeres , 8-blastomeres , 16-blastomeres , 32-blastomeres , blastula , early gastrula , late gastrula)