

Embryonic development of amphioxus

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Embryonic development of amphioxus

1. **Fertilization** : External.
2. **Types of Egg**: According to amount of yolk oligolecithal. According to distribution ; homolecithal.
3. **Types of cleavage**: Equal holoblastic cleavage.
4. Embryonic Development:
 - a. Cleavage:
First: vertical 2 Second : vertical 4
Third : Meridional 8 Fourth : 2 latitudal 16
Fifth : 2 Meridional 32 Sixth : 64
Seventh : 128



- Blastulation:

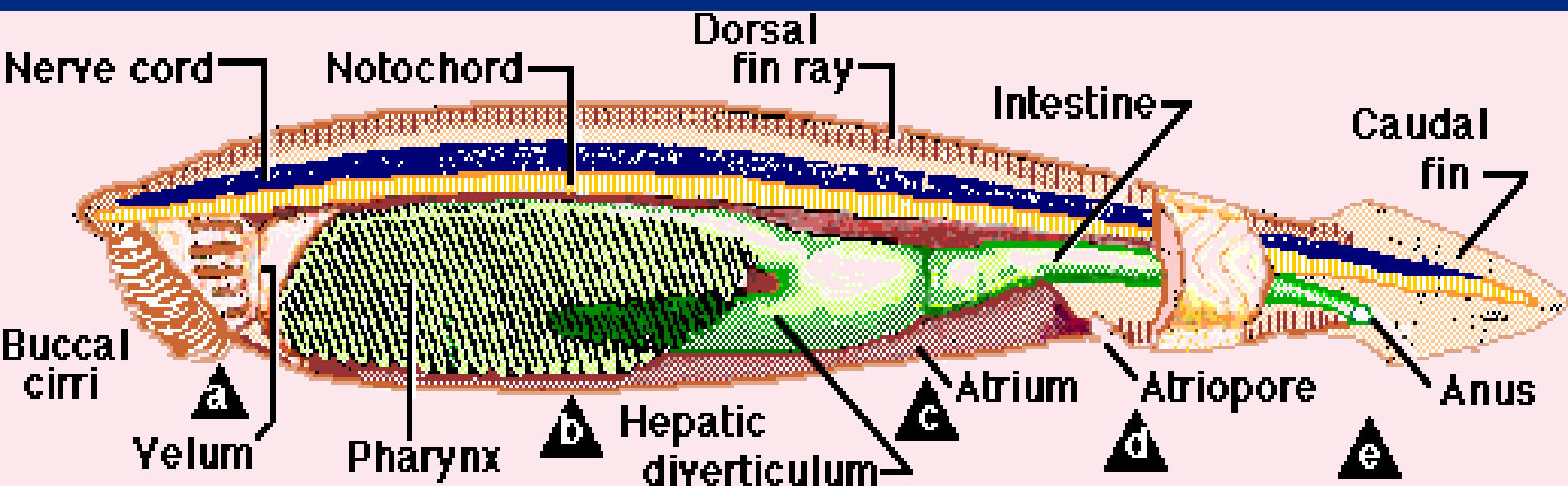
Blastula stage is a ball of cells that exceeds more than 256 blastomeres. The blastoderm formed of one cell layer thick. The blastocoele enclosed almost the central cavity .

- Gastrulation:

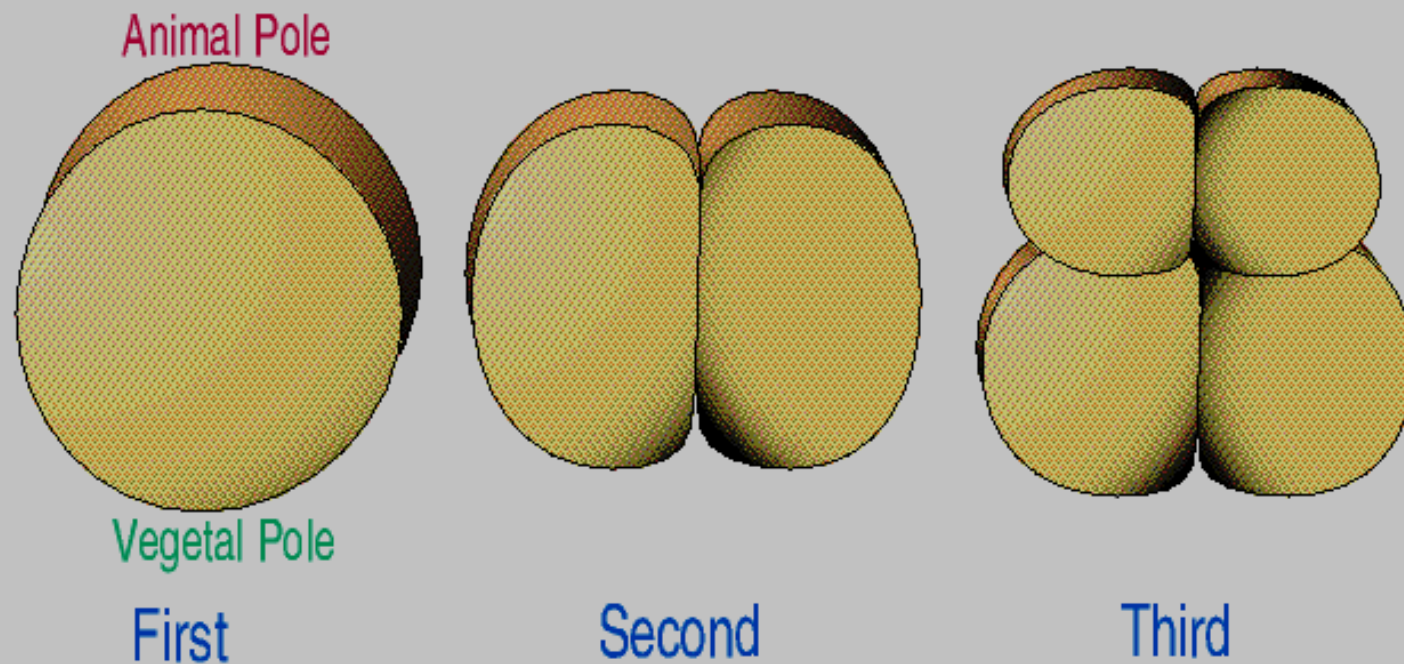
This occurred as a result of different cell movements simply by epiboly , invagination & involution.







Cleavage in Amphioxus



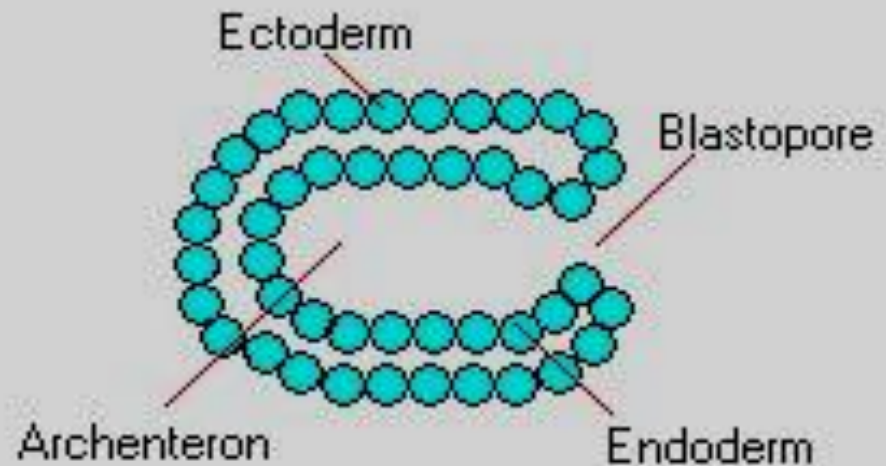
Blastula



Gastrulation



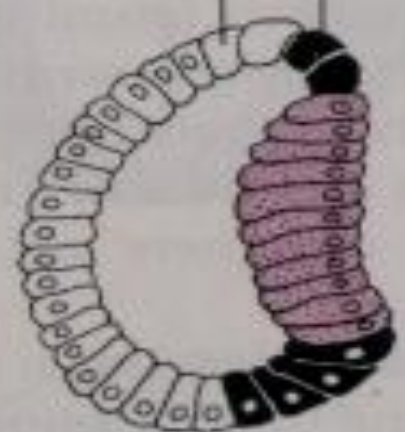
Complete Gastrula



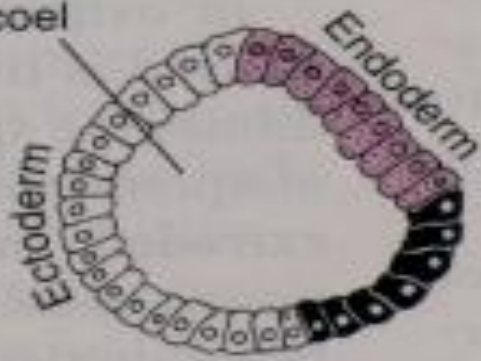
Gastrula of Amphioxus



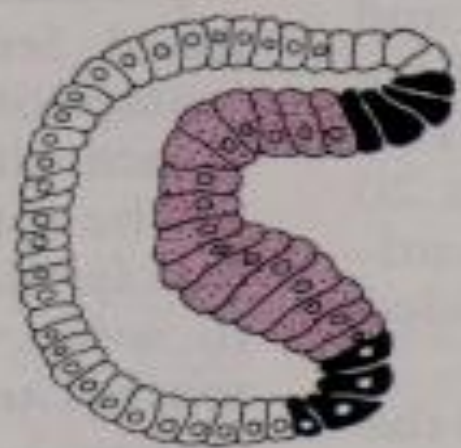
Notochord
Neural plate



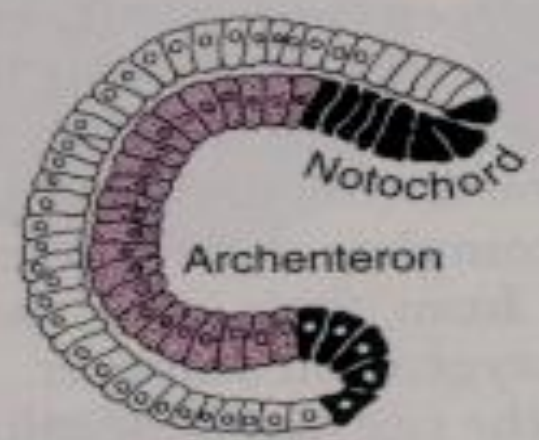
Blastocoel



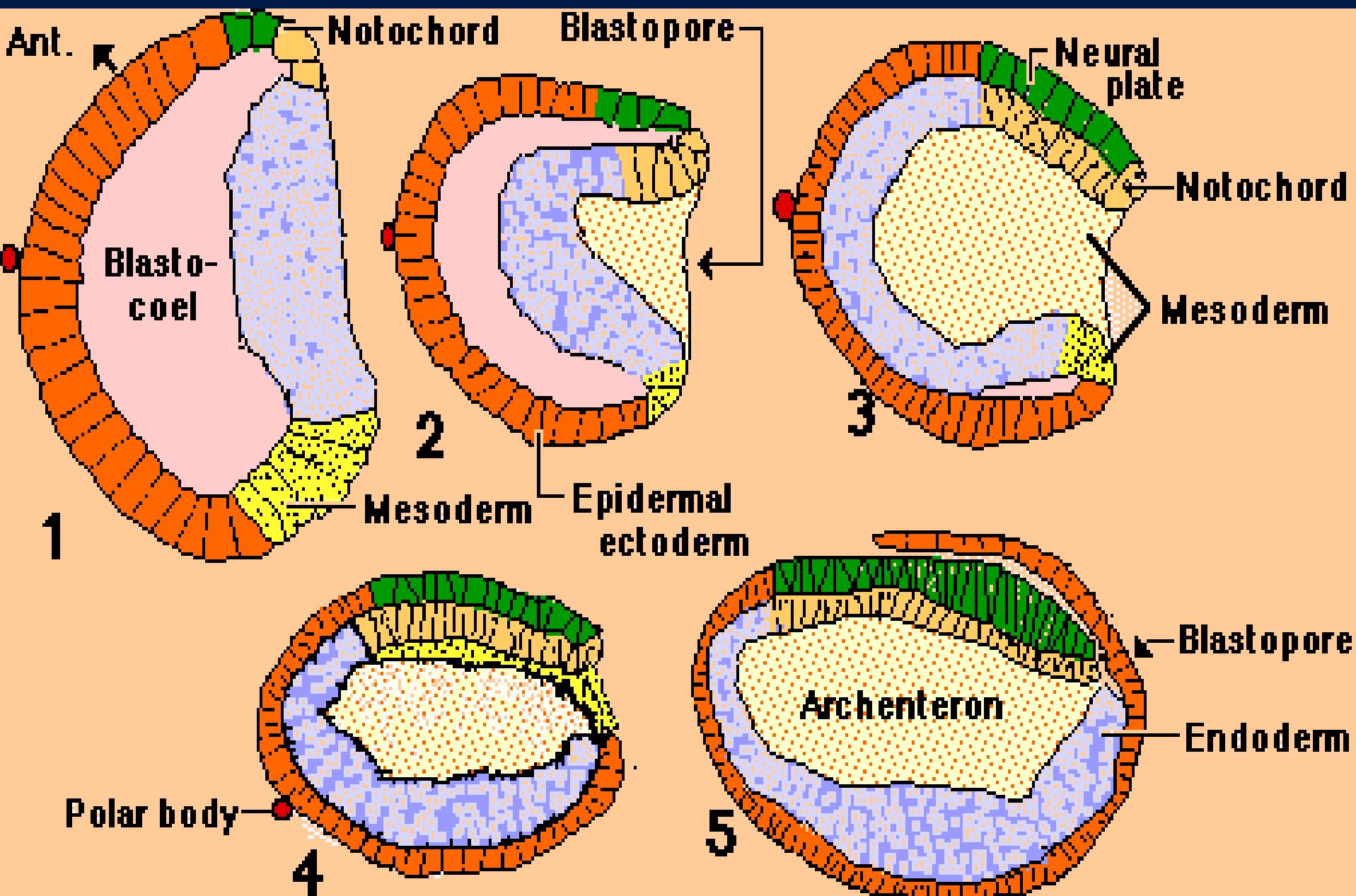
Blastula



Gastrulation
Amphioxus



Gastrula



Amphioxus Gastrulation

Organogenesis

