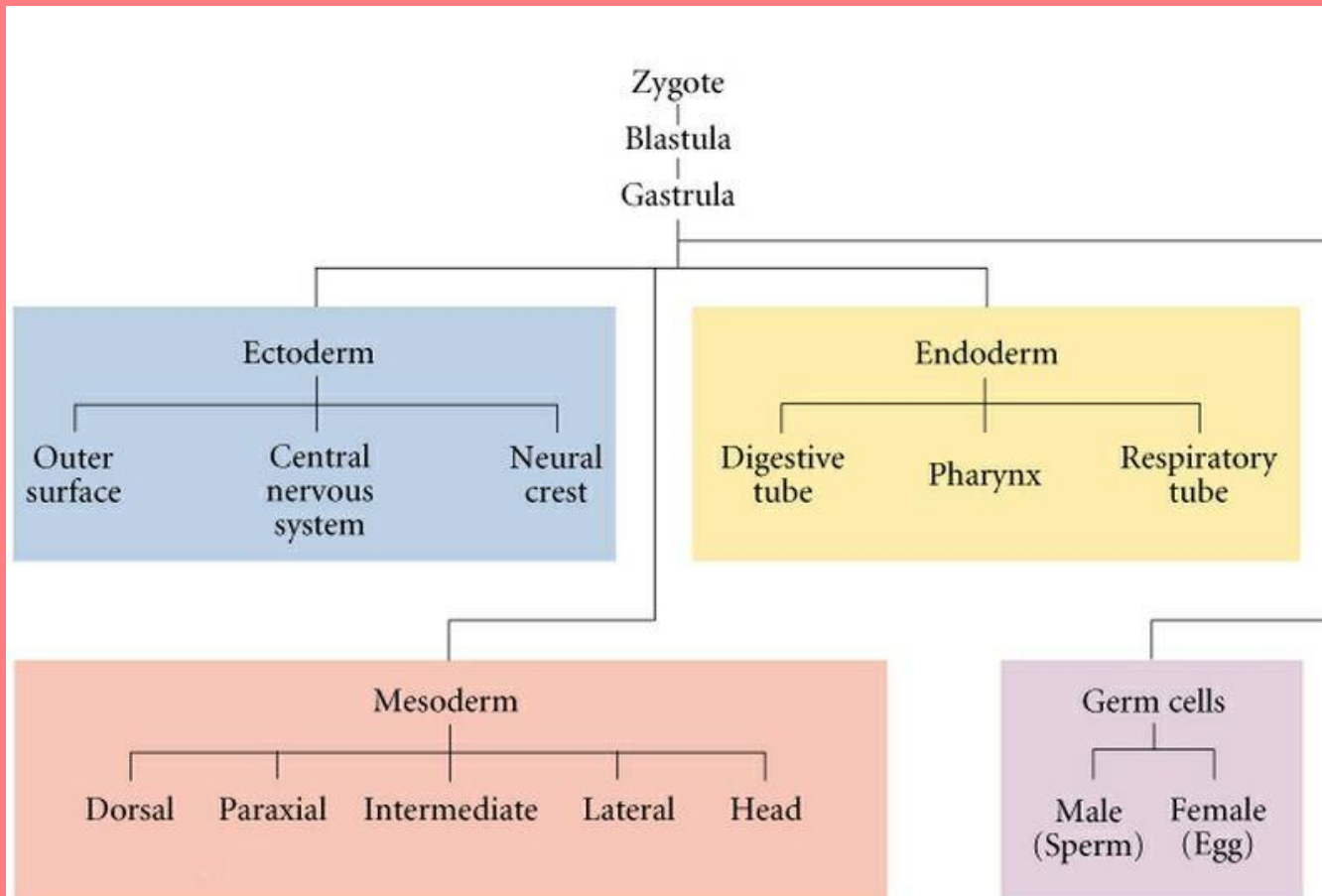


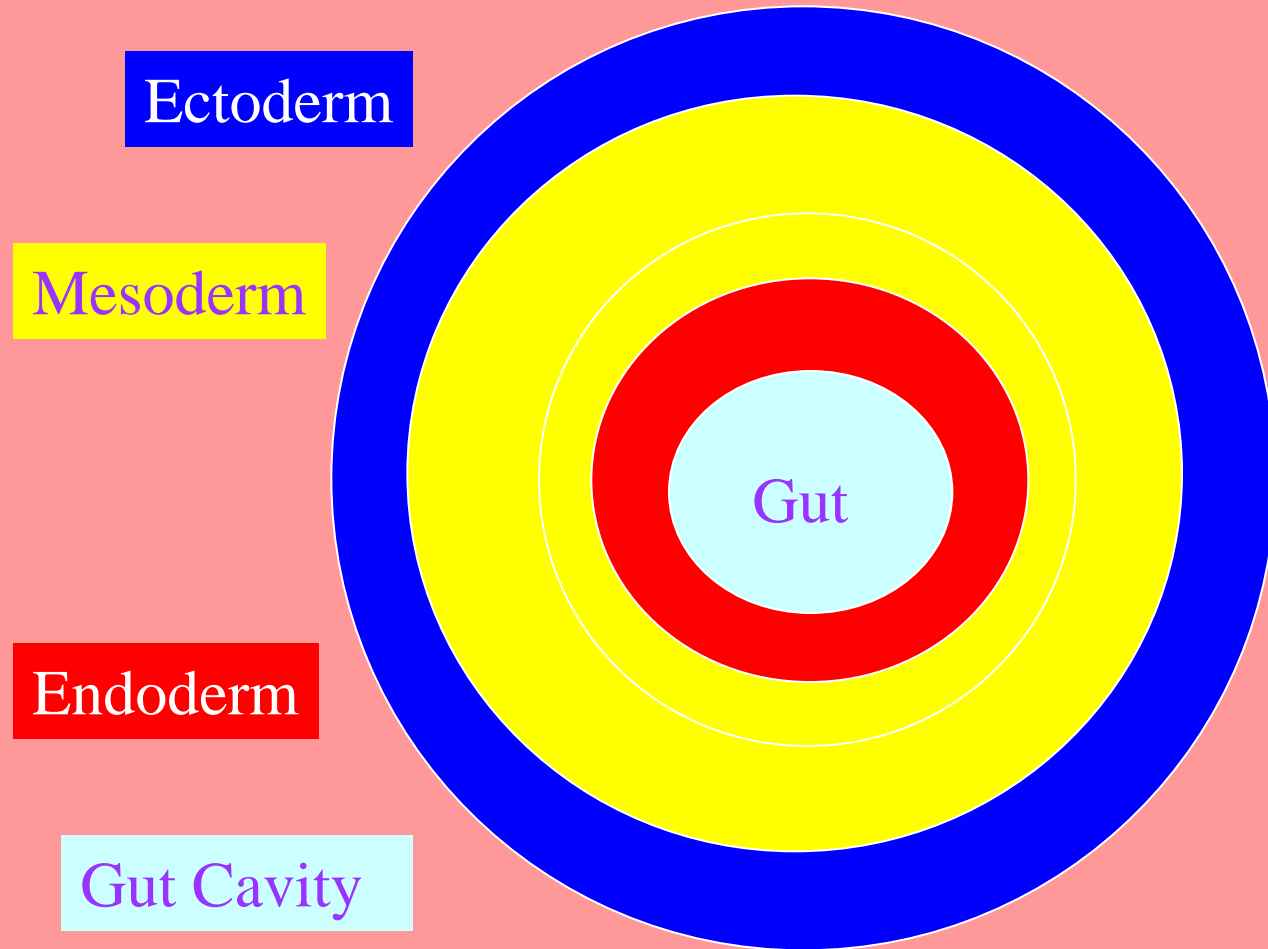
Overview Vertebrate Developmental Anatomy

What Do Layers Formed at Gastrulation Give Rise To?



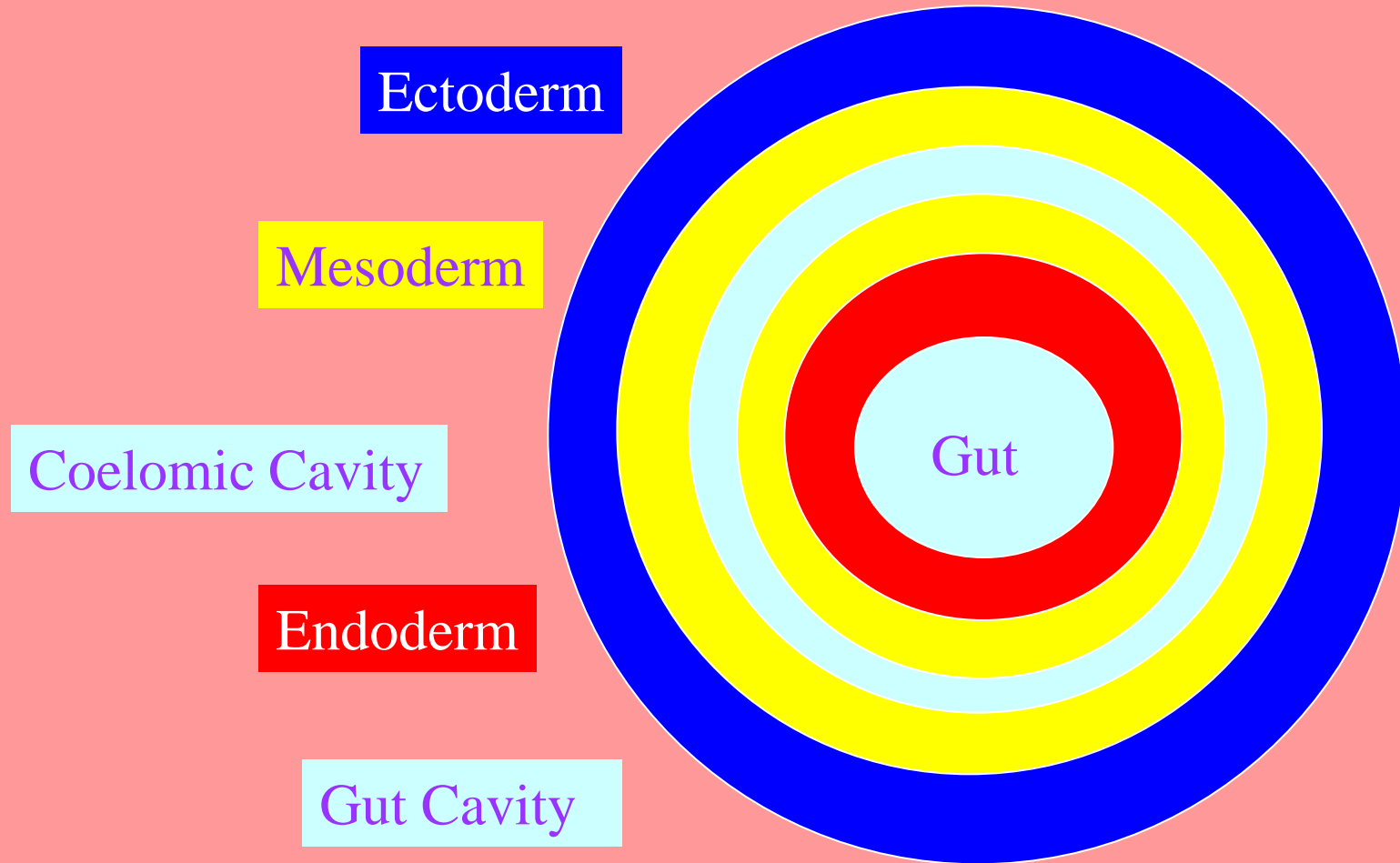
Relationship of Tissue Layers

Transverse Section

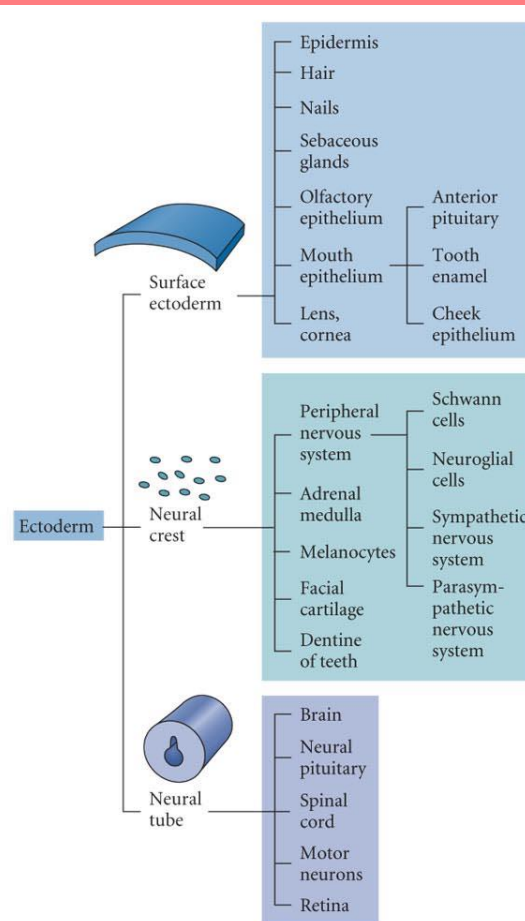


Split of Mesoderm Creates Coelom

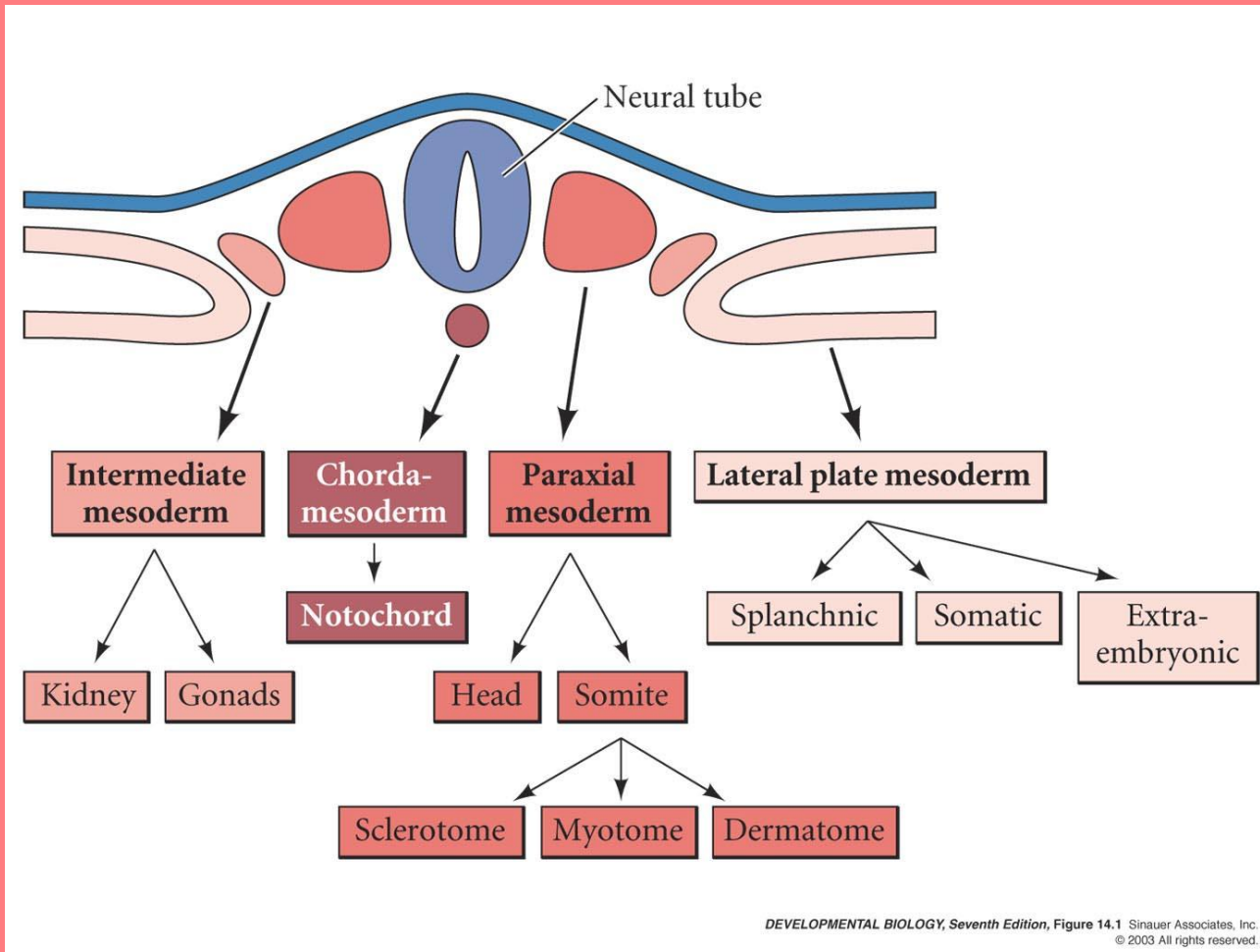
Transverse Section



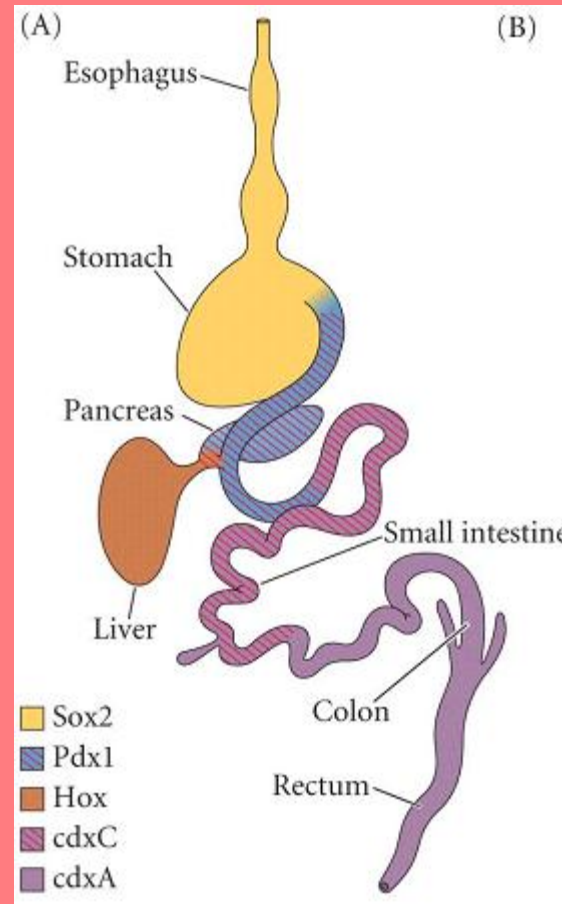
What Are the Major Ectodermal Derivatives?



What Are the Major Mesodermal Derivatives?



What Are the Major Endodermal Derivatives?



Anterior

Posterior

Some Tissues Form From Two Layers

- Respiratory tract, various glands
 - Lining *endo*
 - Outer part *meso*
- Epidermis
 - Outer skin, hair, nails *ecto*
 - Dermis *meso*

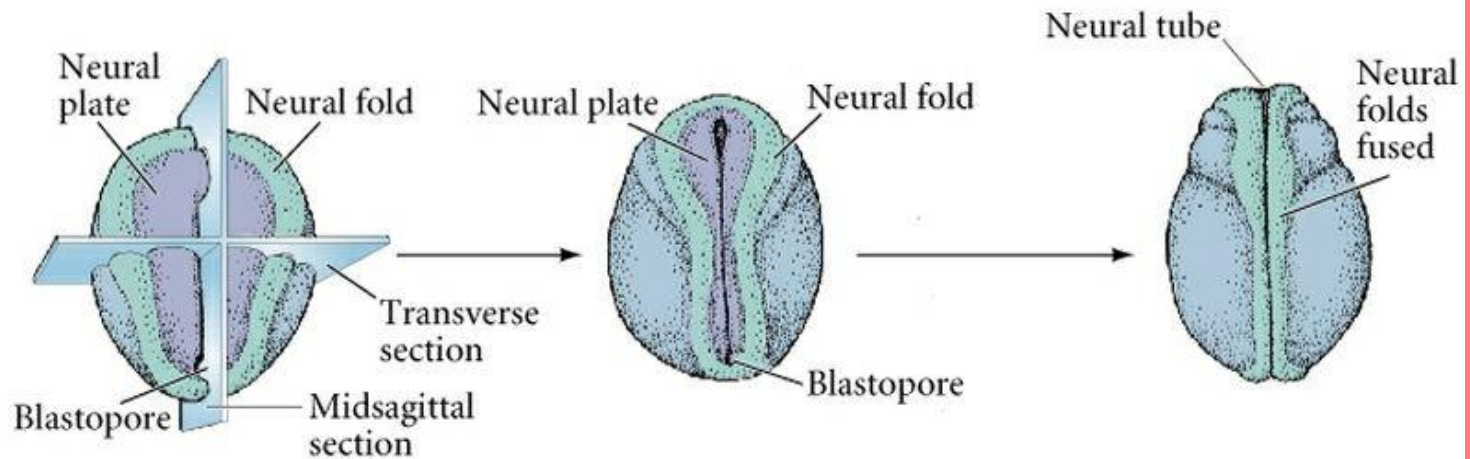
Vertebrate Developmental Anatomy: Ectoderm I

Amphibian Neurula



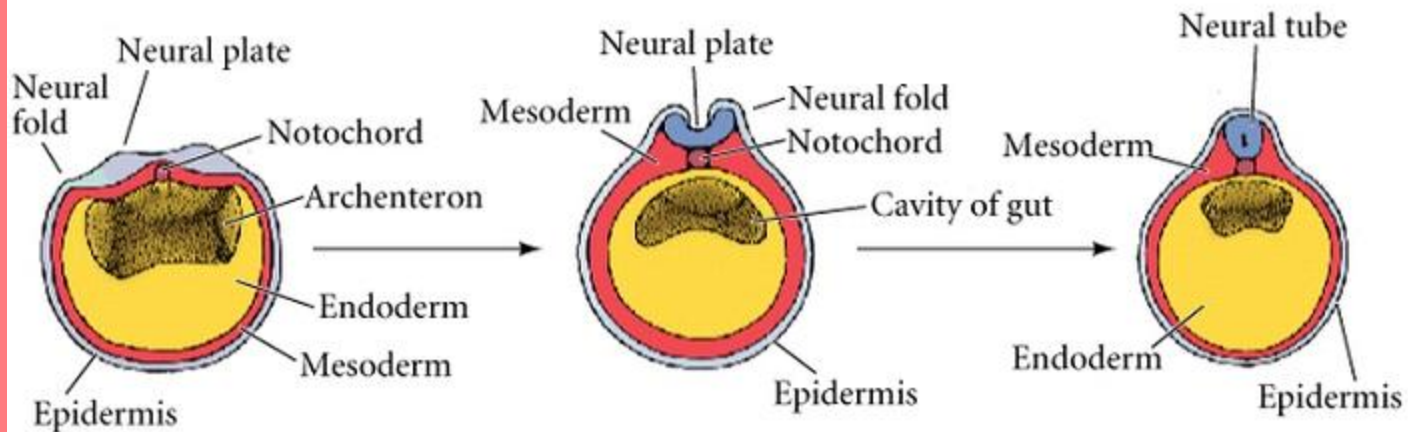
Frog Neurulation

(A) DORSAL SURFACE VIEW



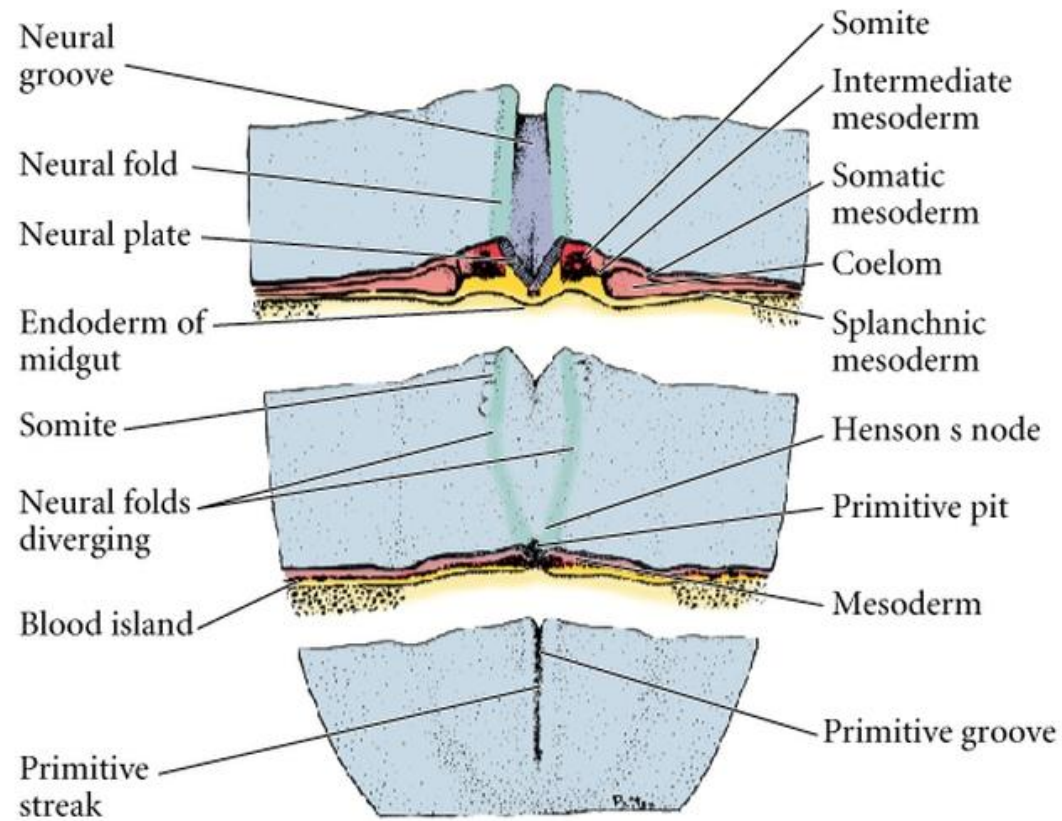
Frog Neurulation

(C) TRANSVERSE SECTION



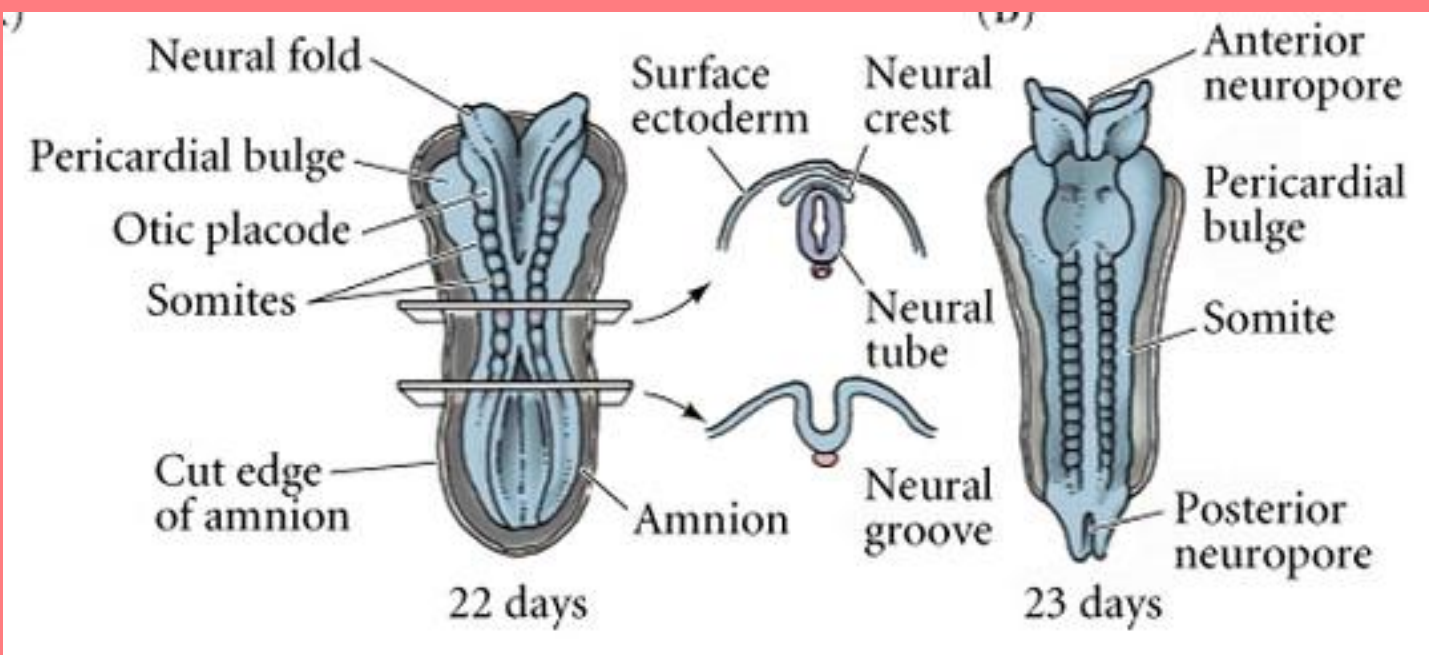
Folding of plate into tube then subdivided into brain and spinal cord

Chick Neurulation

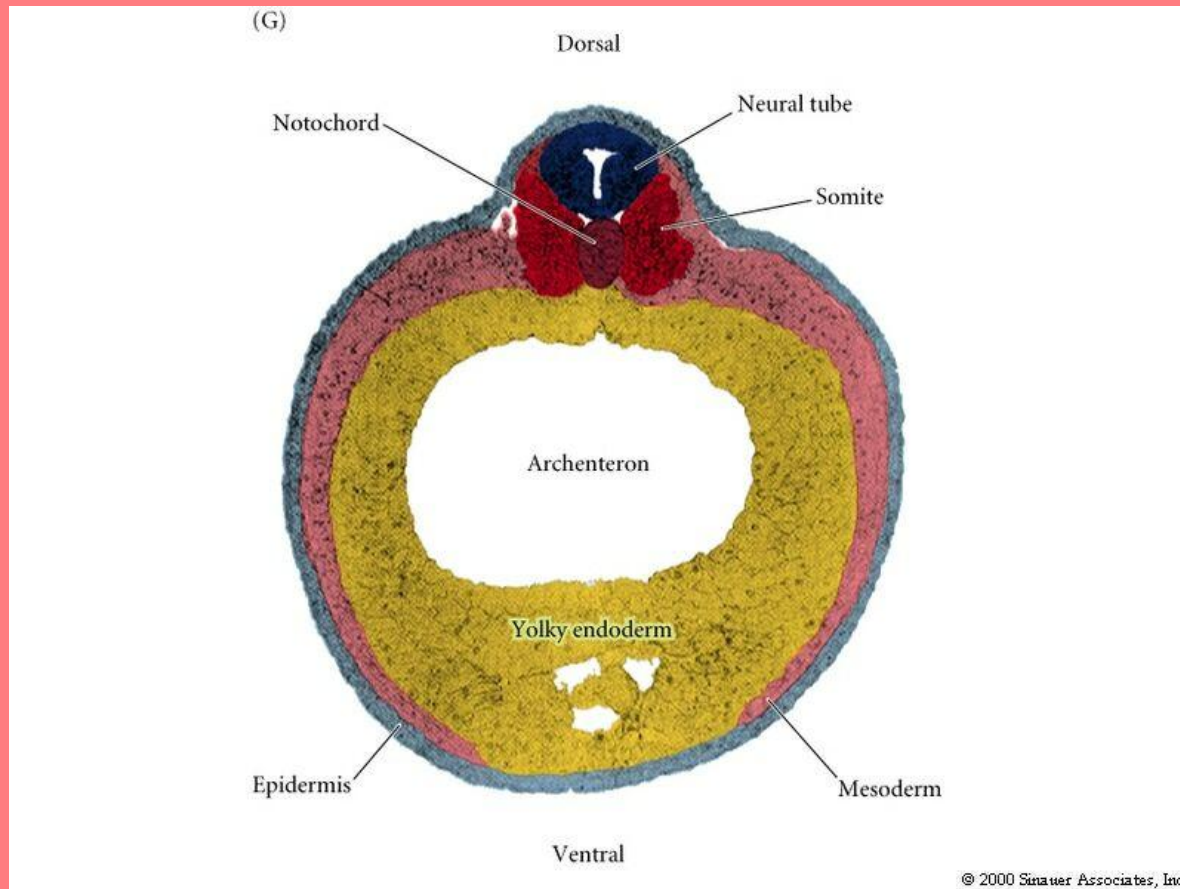


Posterior

Human Neurulation



Section Through Frog Neurula

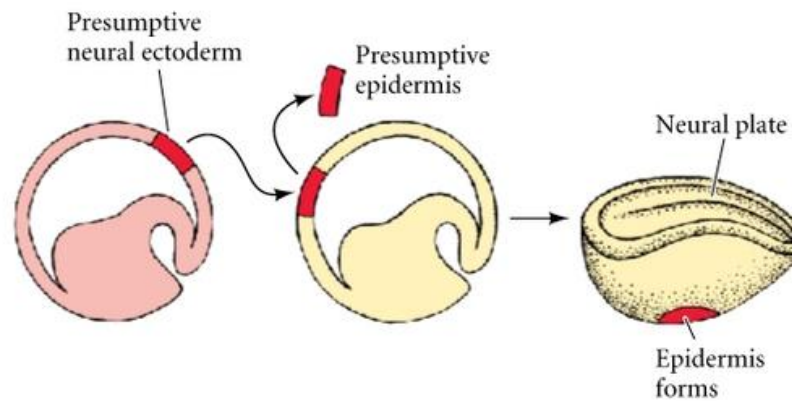


Neural Tube and Notochord

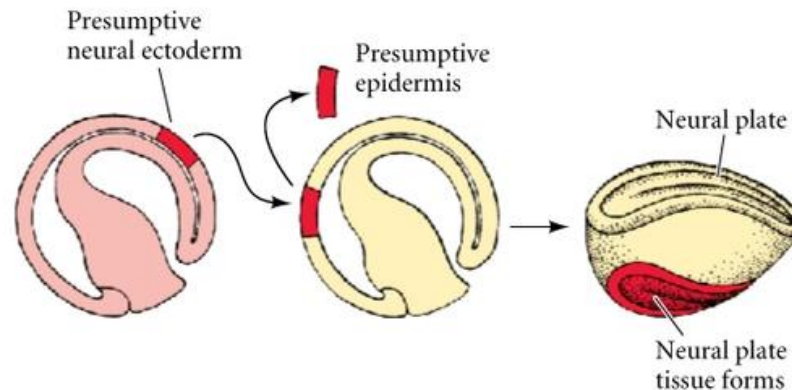


Determination of Nervous System in Amphibians

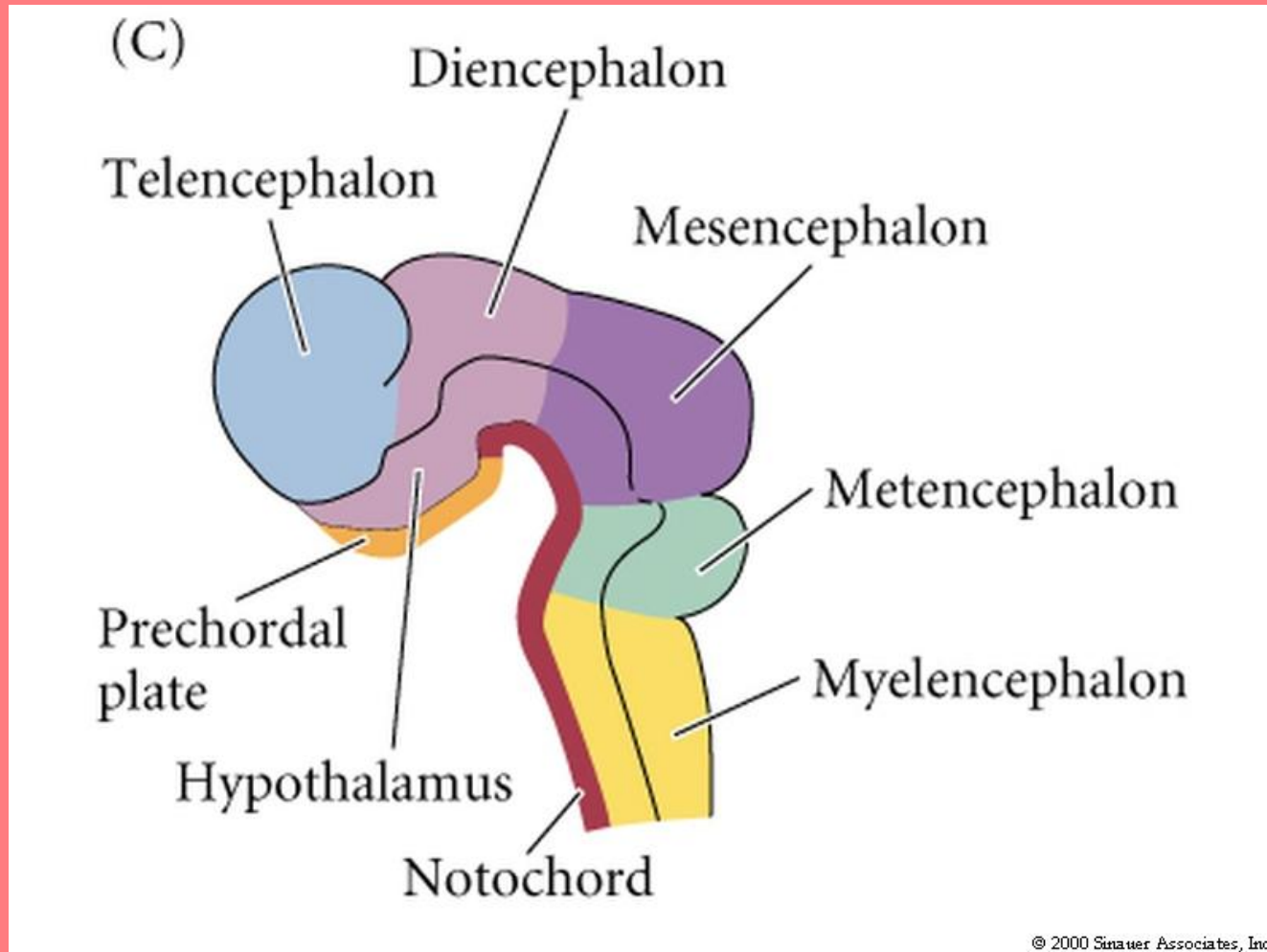
(A) EARLY GASTRULA



(B) LATE GASTRULA

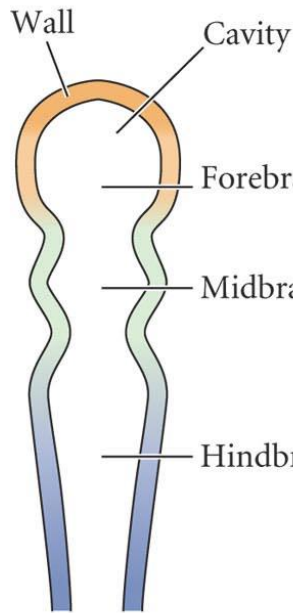


Further Subdivision the Brain

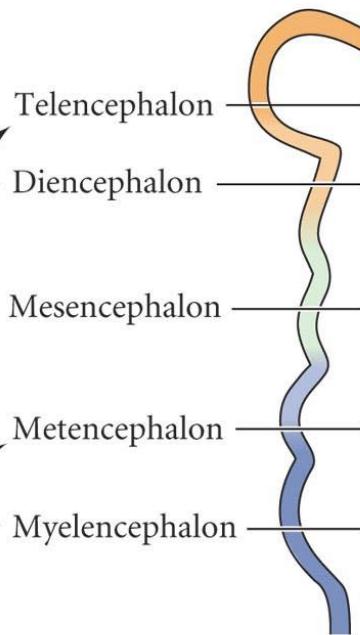


Major Brain Derivatives (Human)

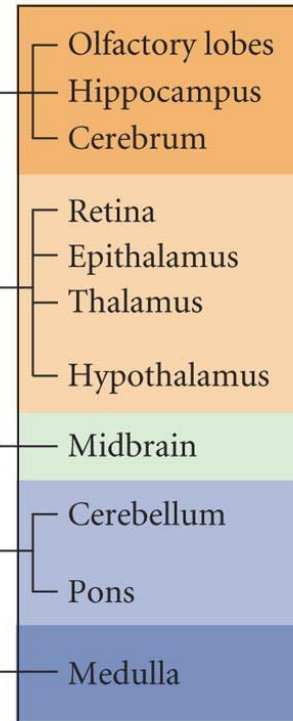
3 Primary vesicles



5 Secondary vesicles



Adult derivatives



Spinal cord

Brain Development Summary

