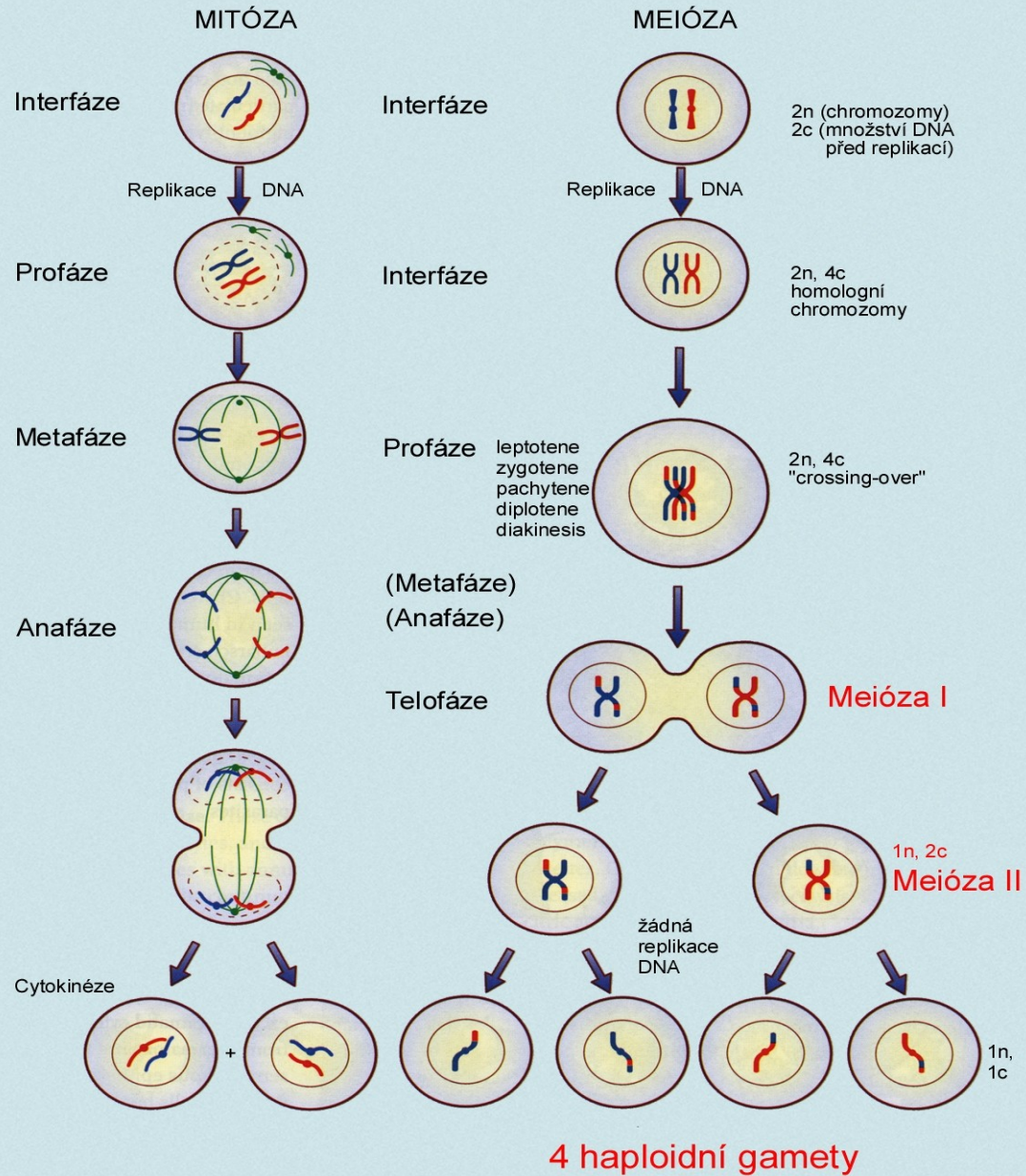




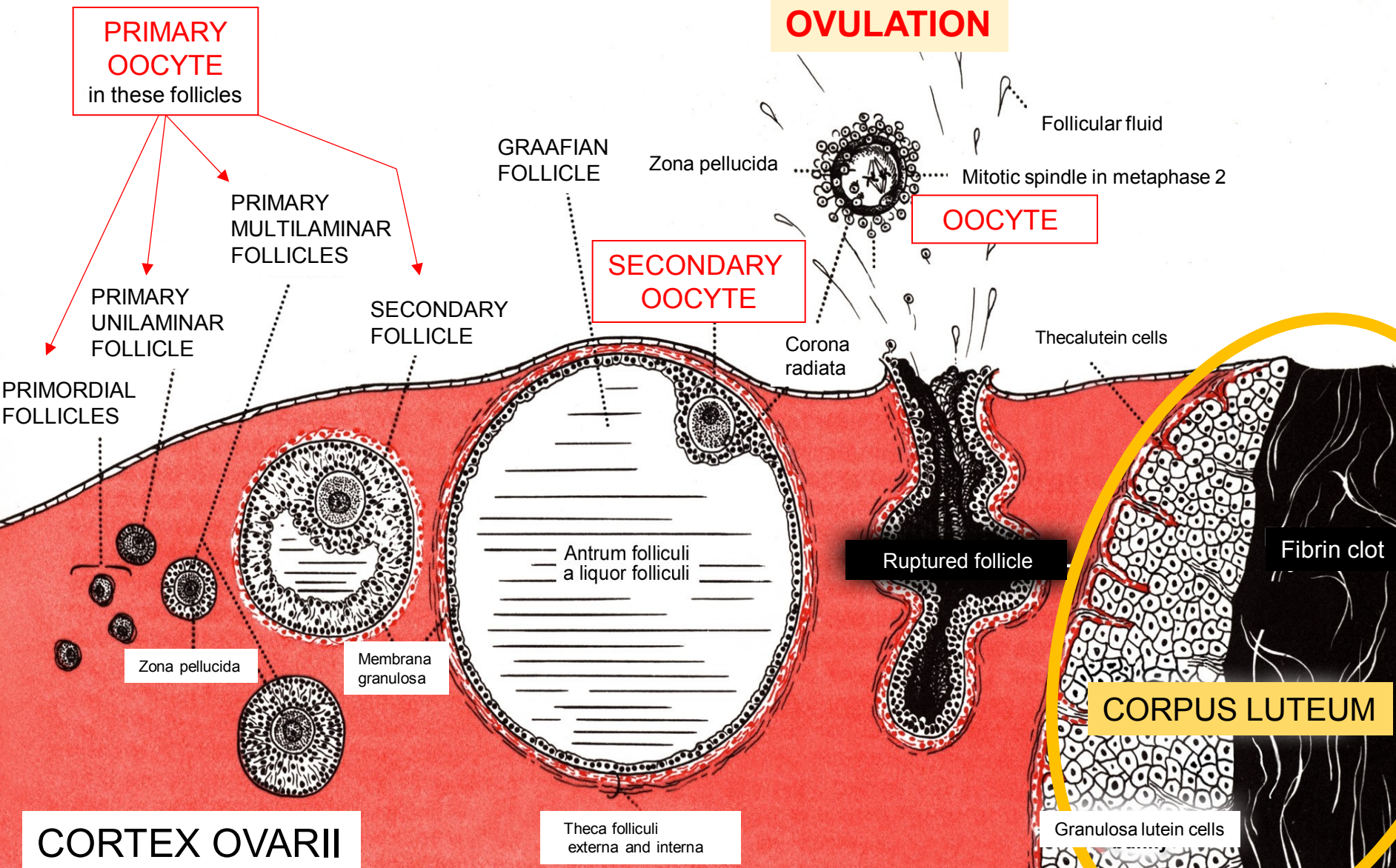
# GENERAL EMBRYOLOGY 1

- Meiosis. Development of gametes. Fertilization. Cleavage.
- Implantation. Changes in blastocyst during implantation.
- Differentiation of embryoblast.
- Germ disc. Development of embryonic mesoderm and notochord. Somites. The other axial organs of embryo.
- Flexion of embryo. Development of the umbilical cord.

# MITOSIS AND MEIOSIS – the main differences



# GROWTH AND MATURATION OF OVARIAN FOLLICLES



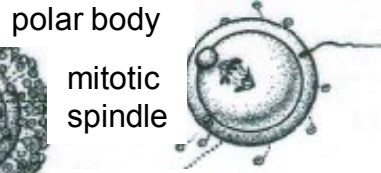
# FERTILIZATION AND IMPLANTATION

oocyte II



cumulus oophorus

sperm penetration



zona pellucida

ovum



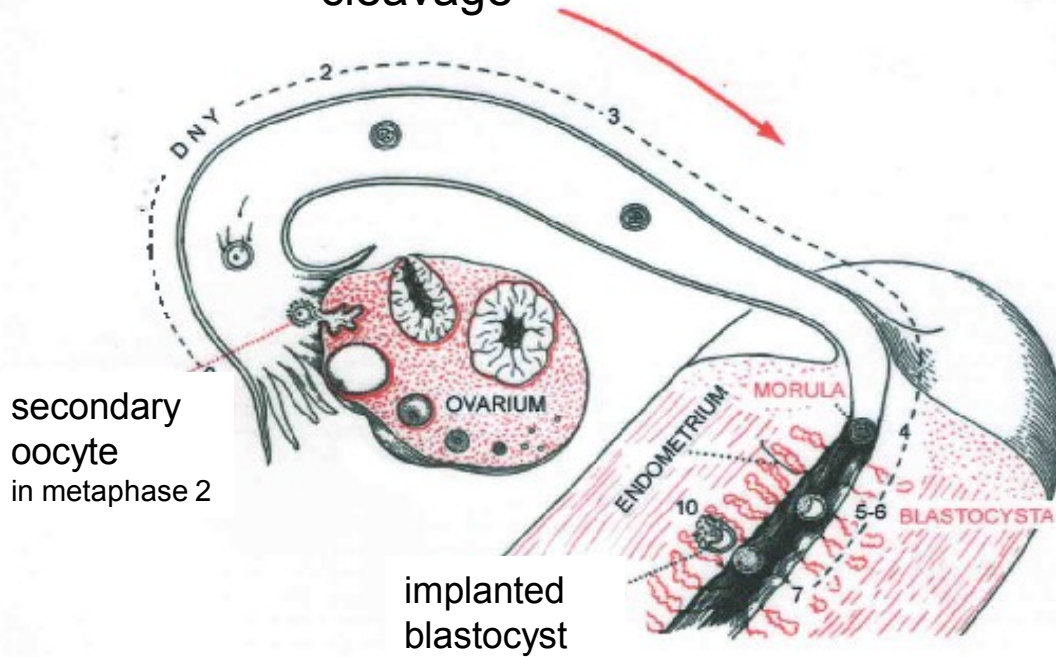
pronuclei

begining of cleavage



diploid set of chromosomes

cleavage



secondary oocyte in metaphase 2

implanted blastocyst

# FERTILIZATION

Zygote

– 18 h after fertilization



24 h



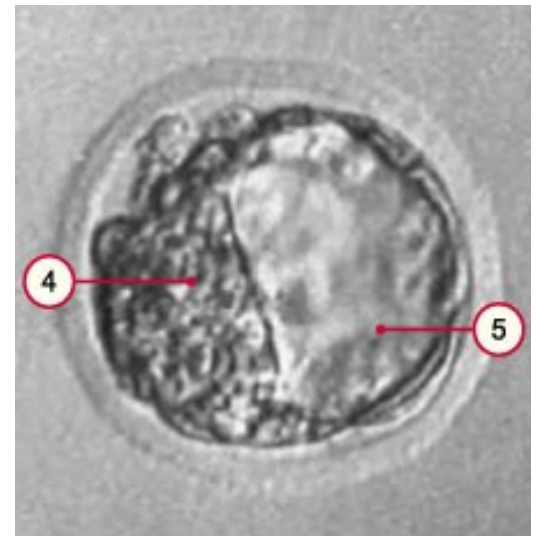
45 h



72 h

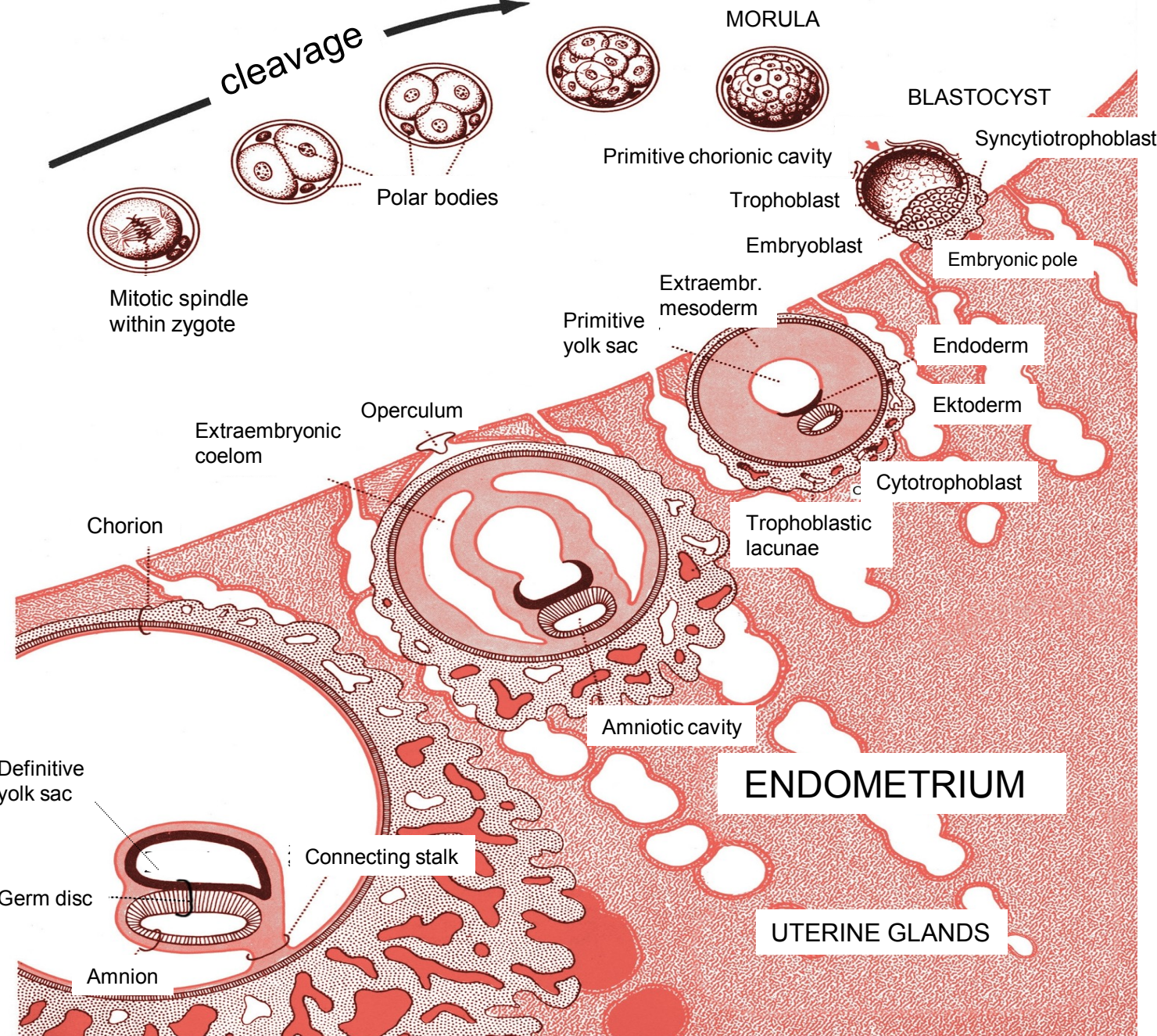


Morula – 96 h

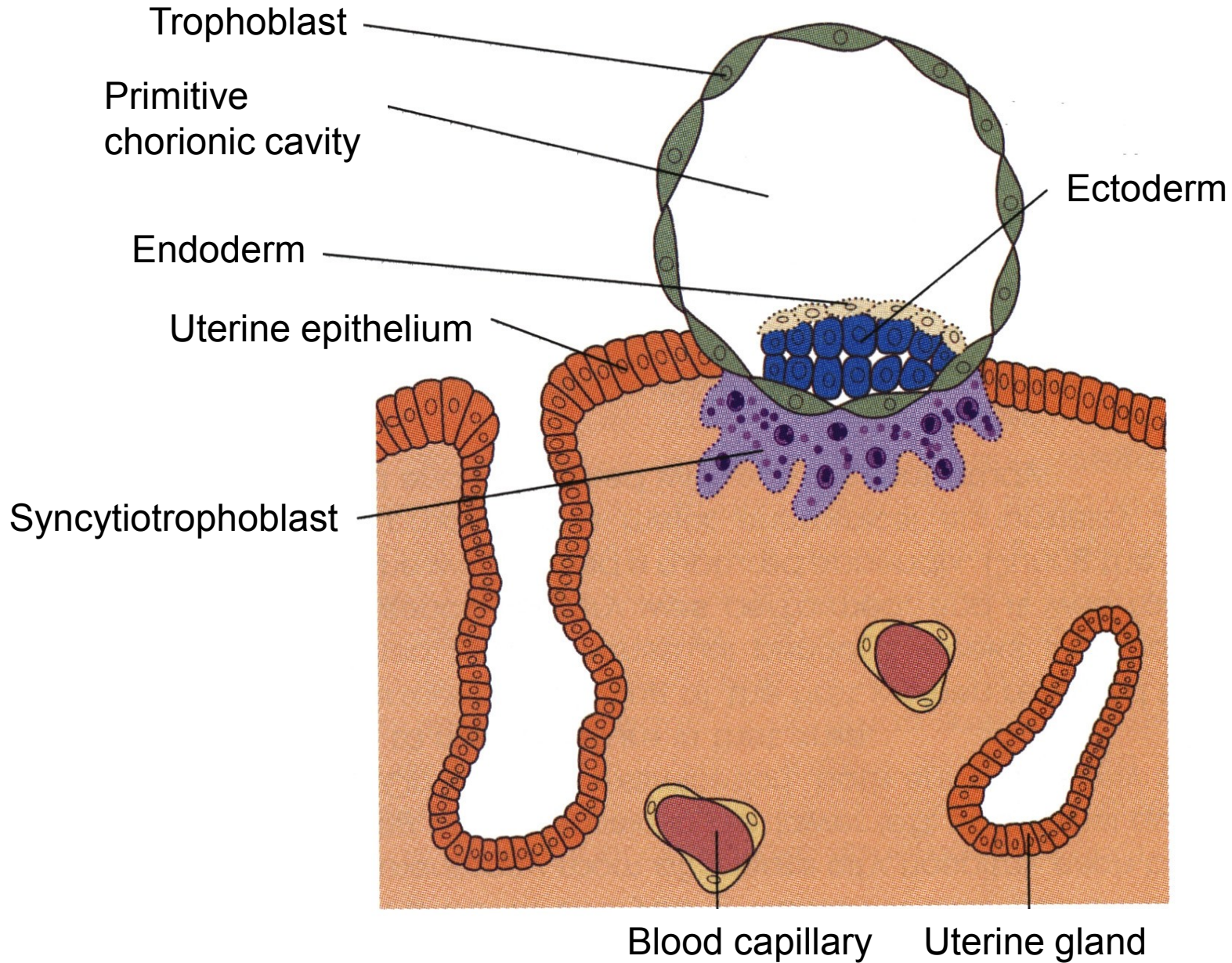


Blastocyst

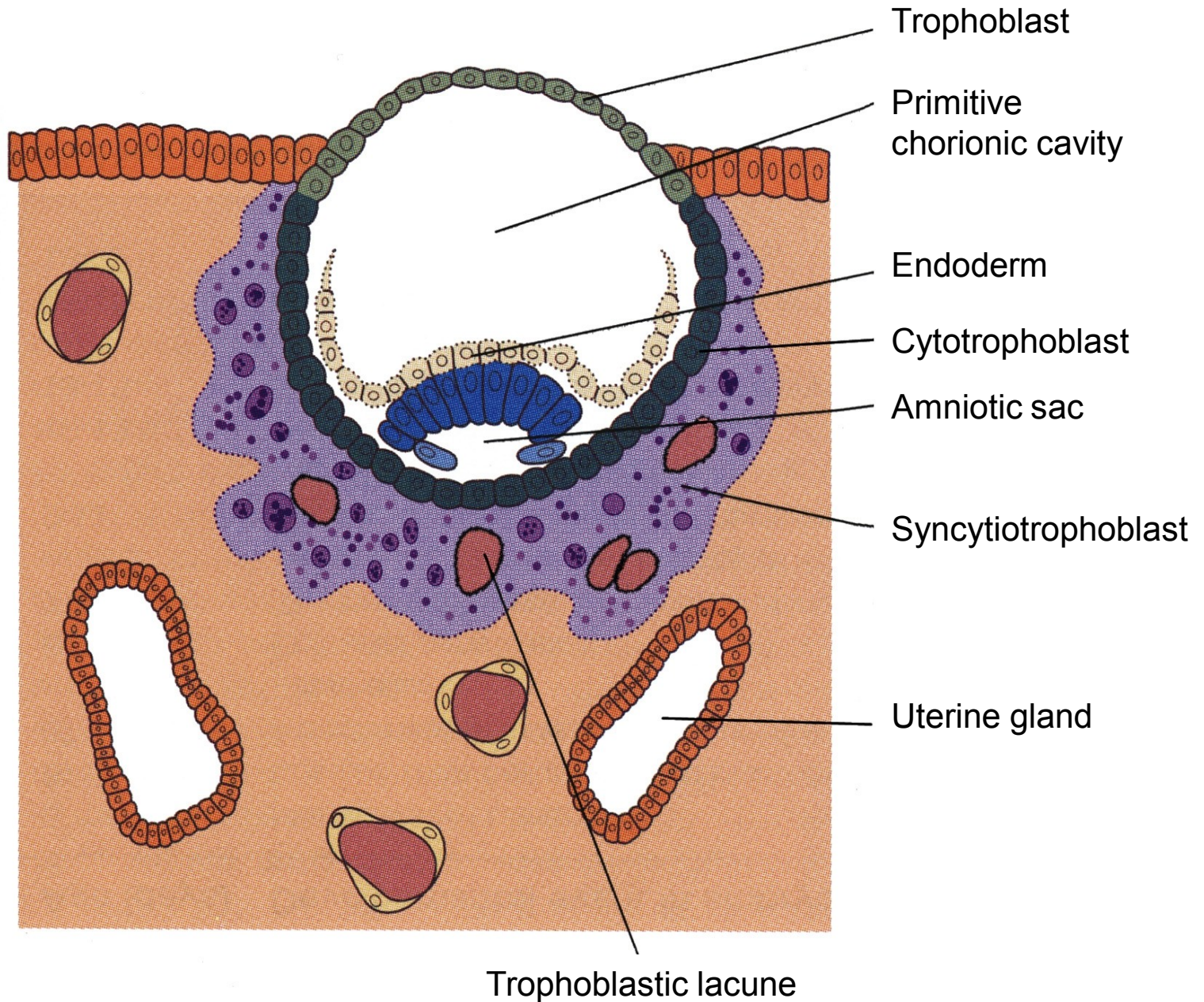
# CLEAVAGE AND IMPLANTATION



# IMPLANTATION – DAY 7

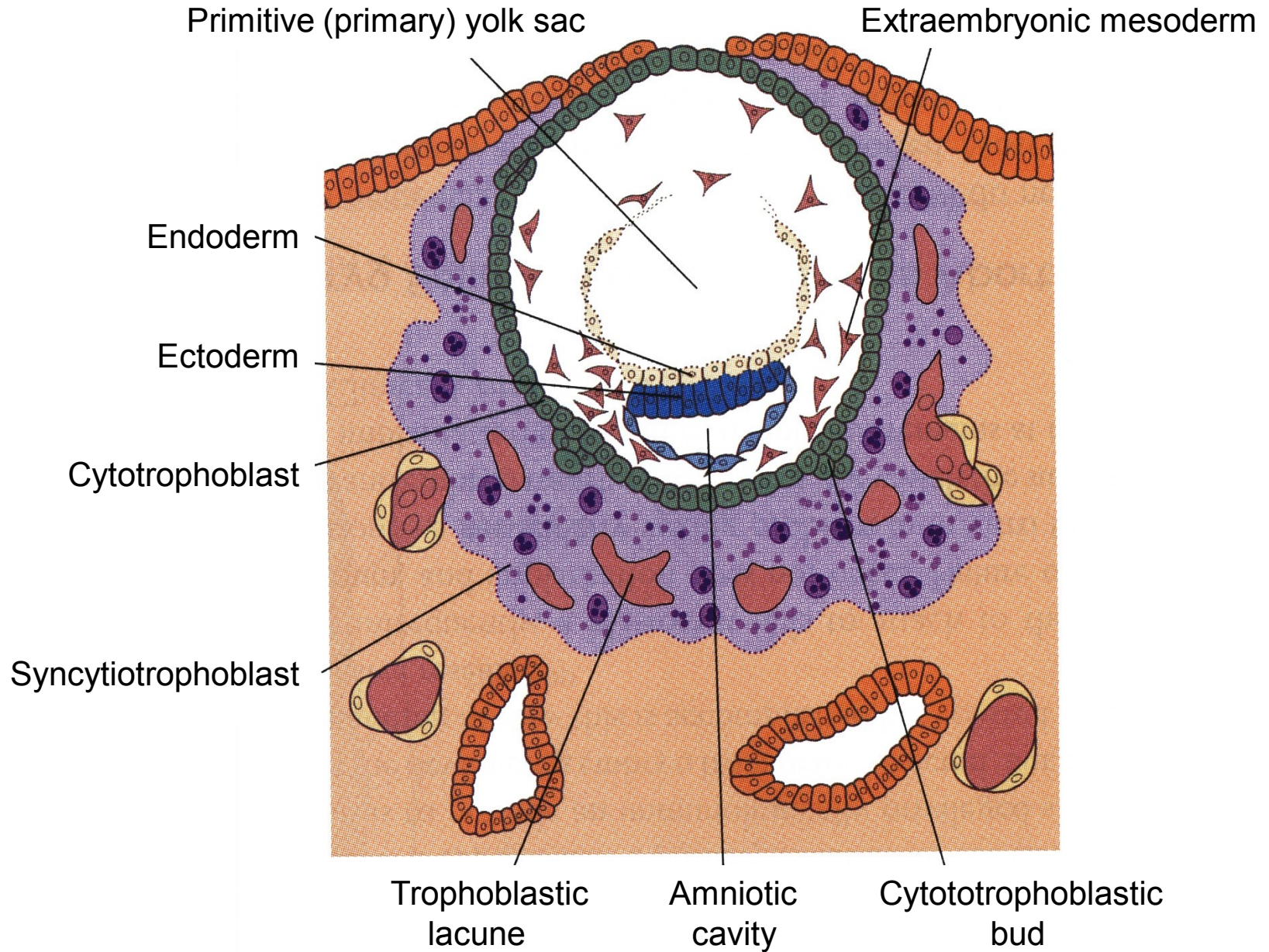


# IMPLANTATION – DAY 8 1/2

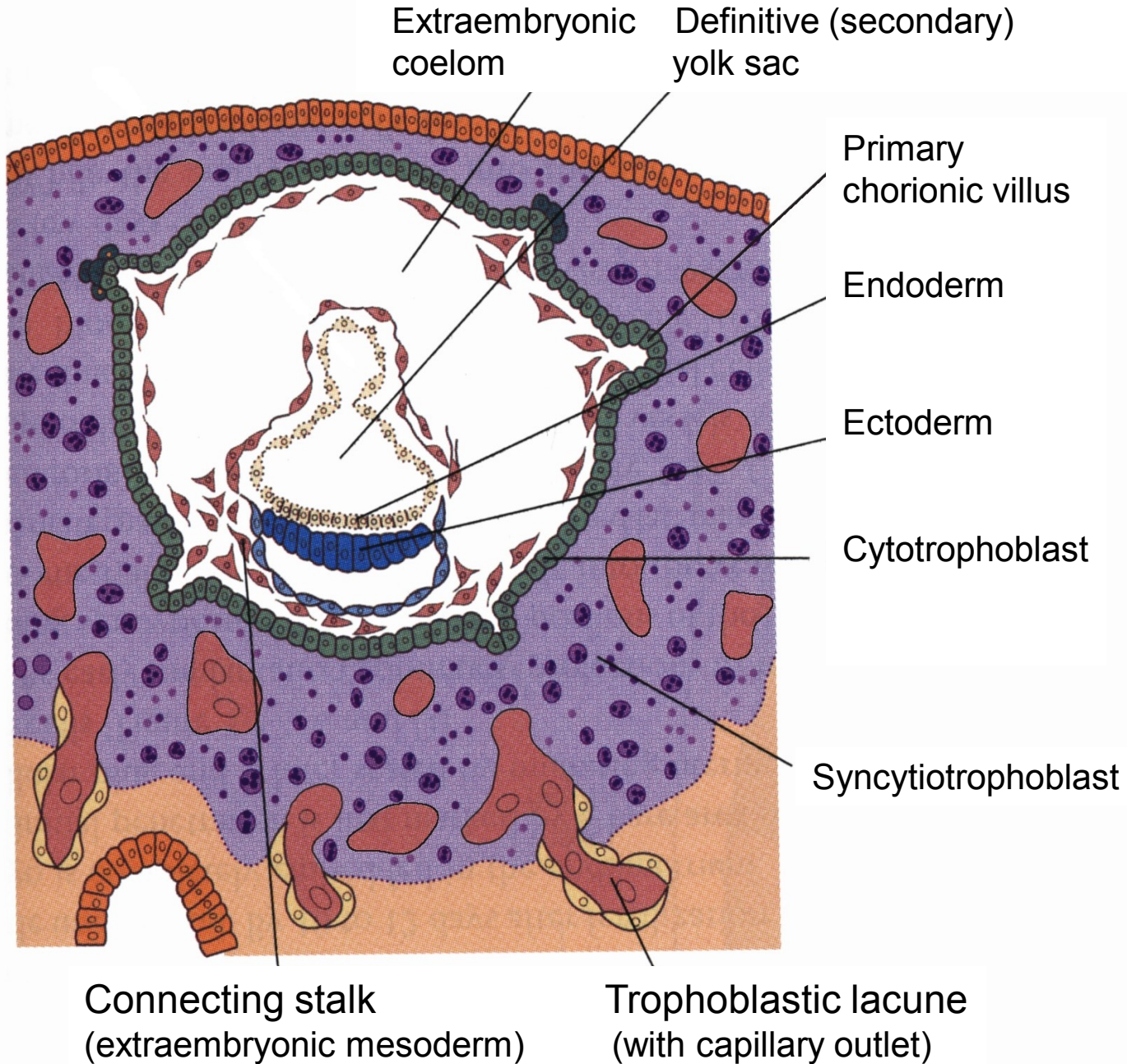




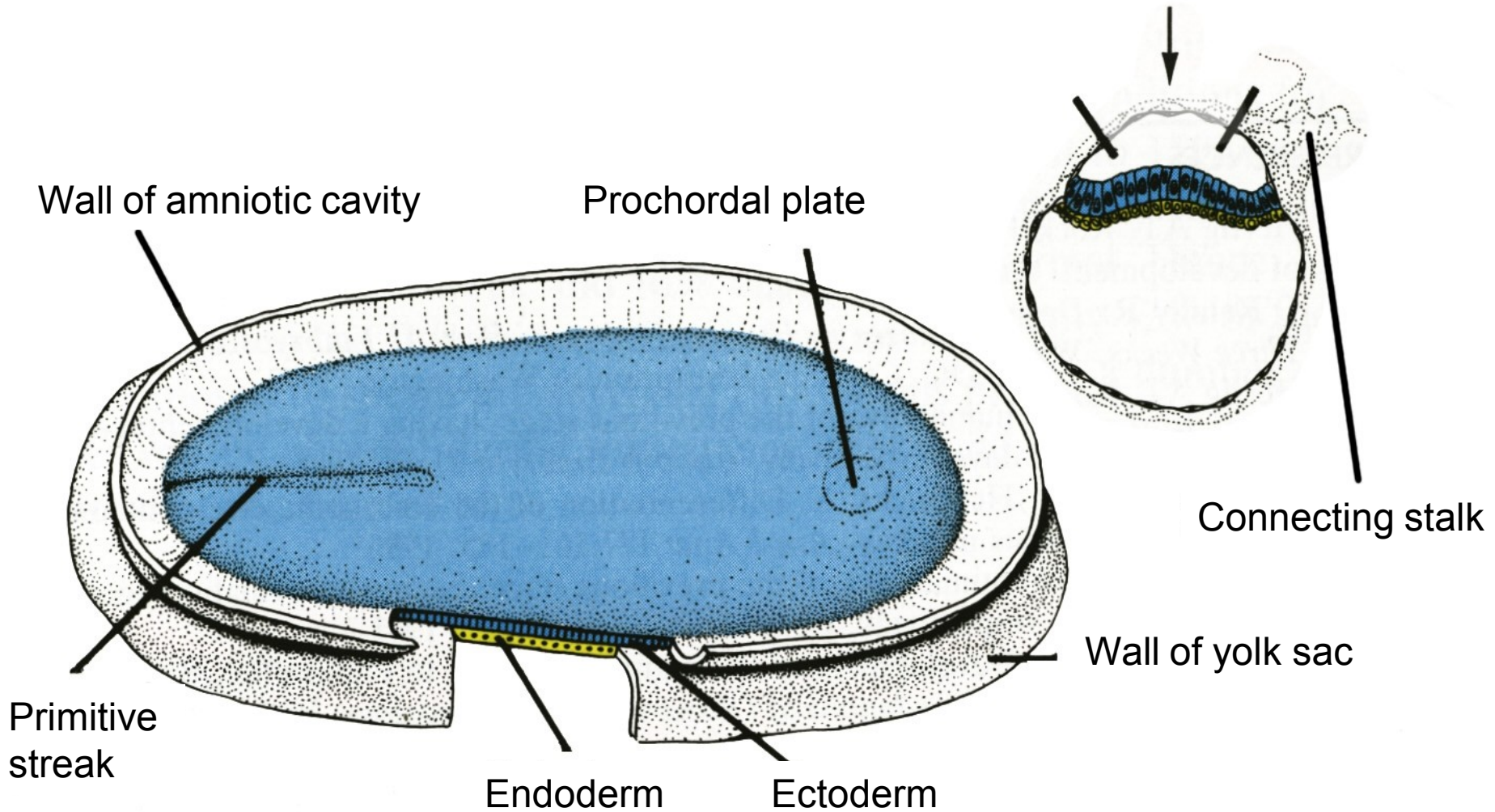
# IMPLANTATION – DAY 10



# IMPLANTATION – DAY 13

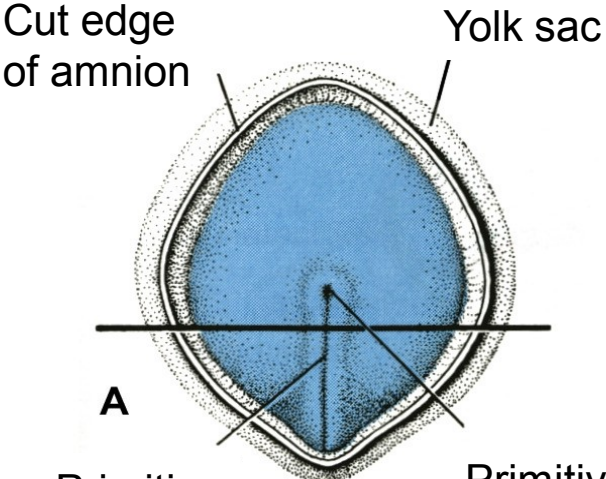


# DORSAL SIDE OF GERM DISC – DAY 14

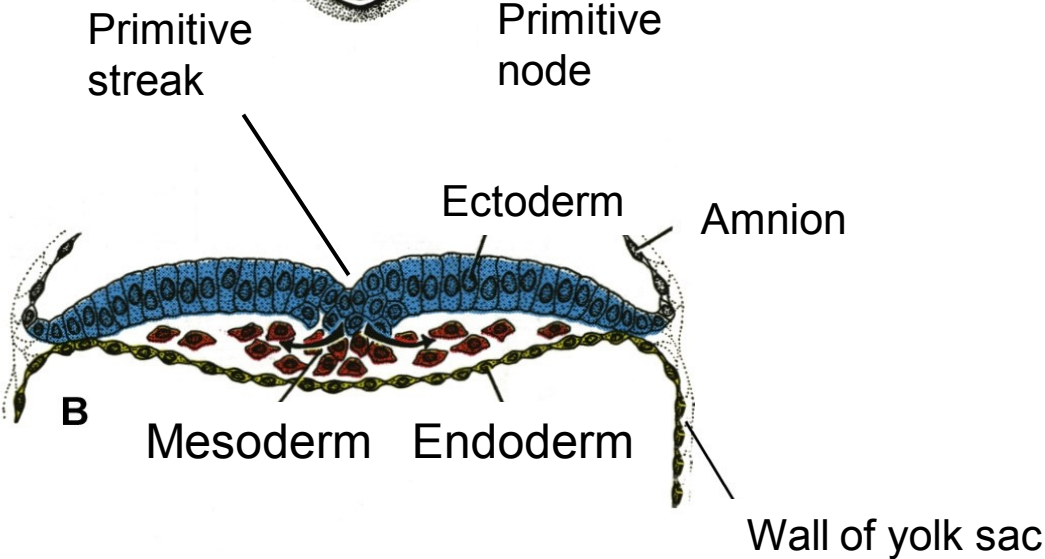


# GERM DISC - DAY 16

A – view on dorsal side:



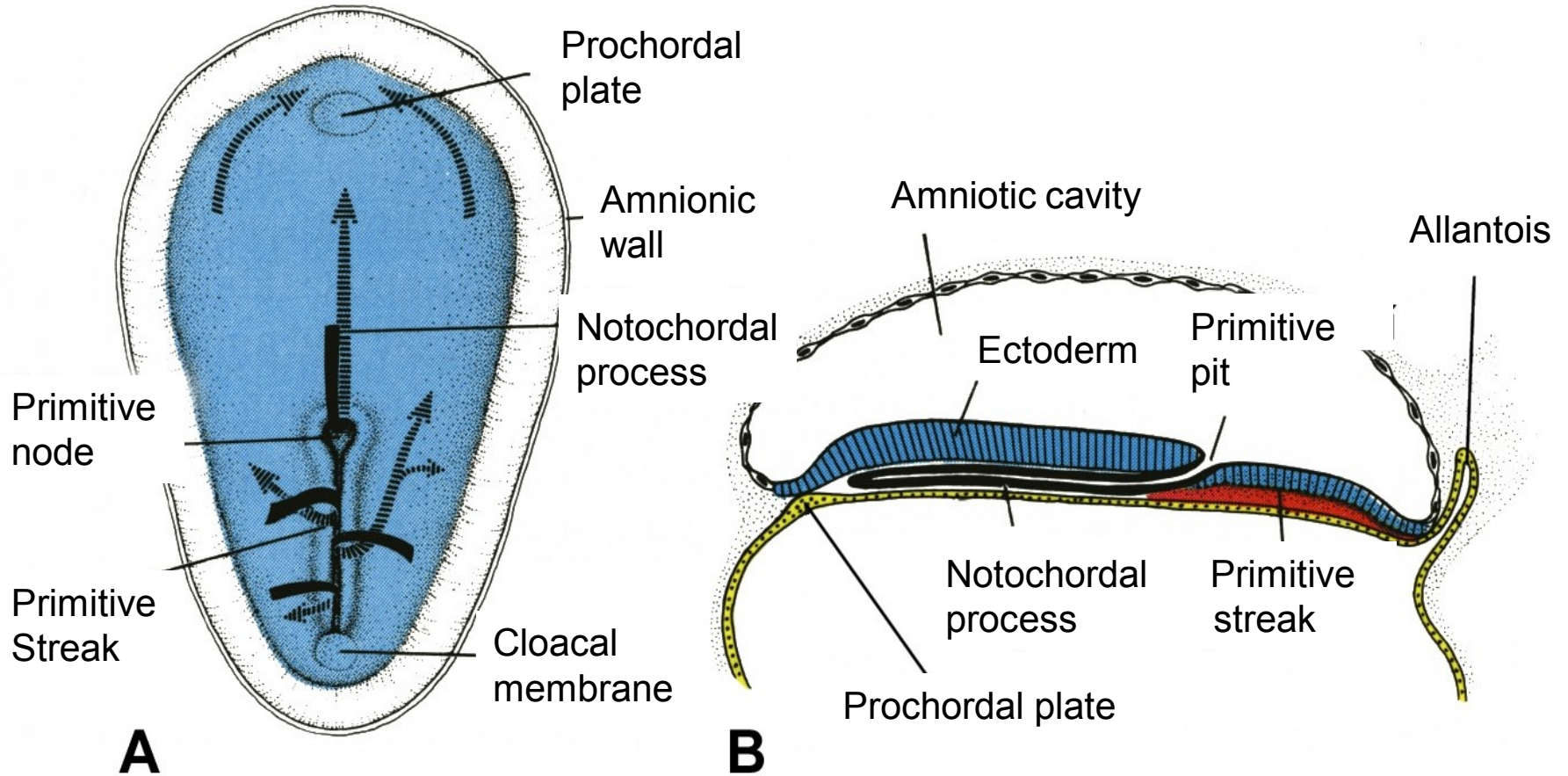
B – transverse section through germ disc:



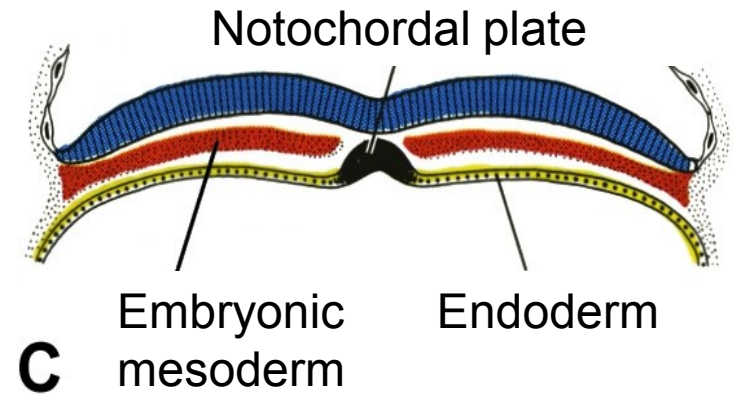
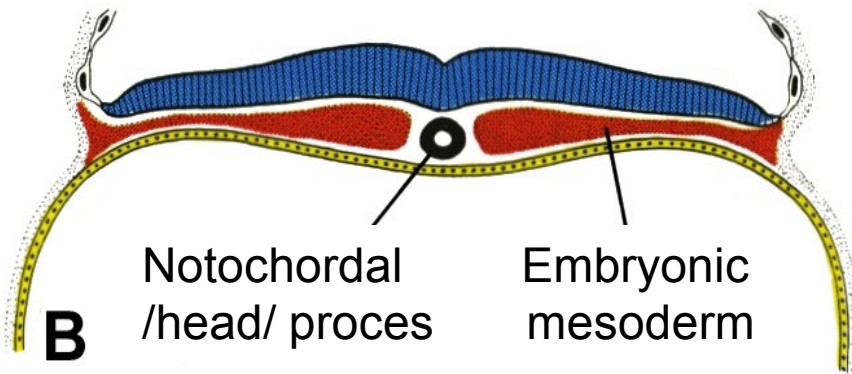
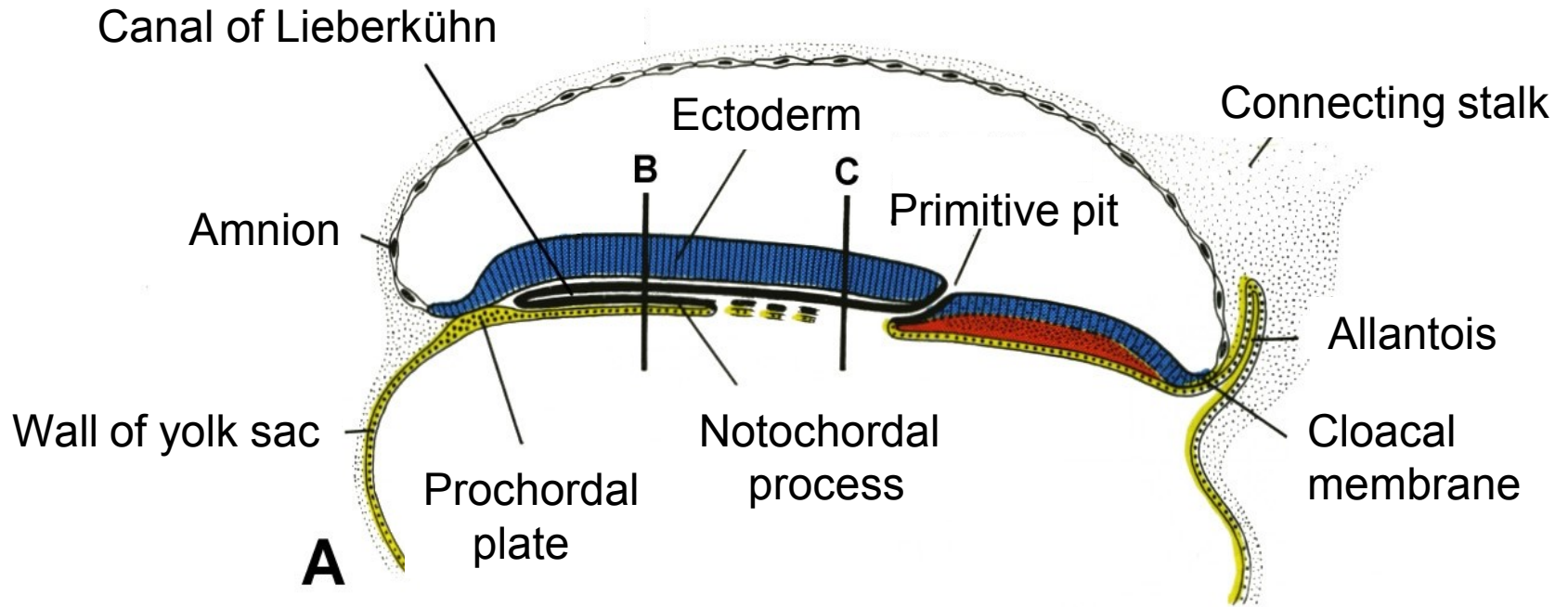
# GERM DISC - DAY 16

A – view on dorsal side

B – longitudinal section

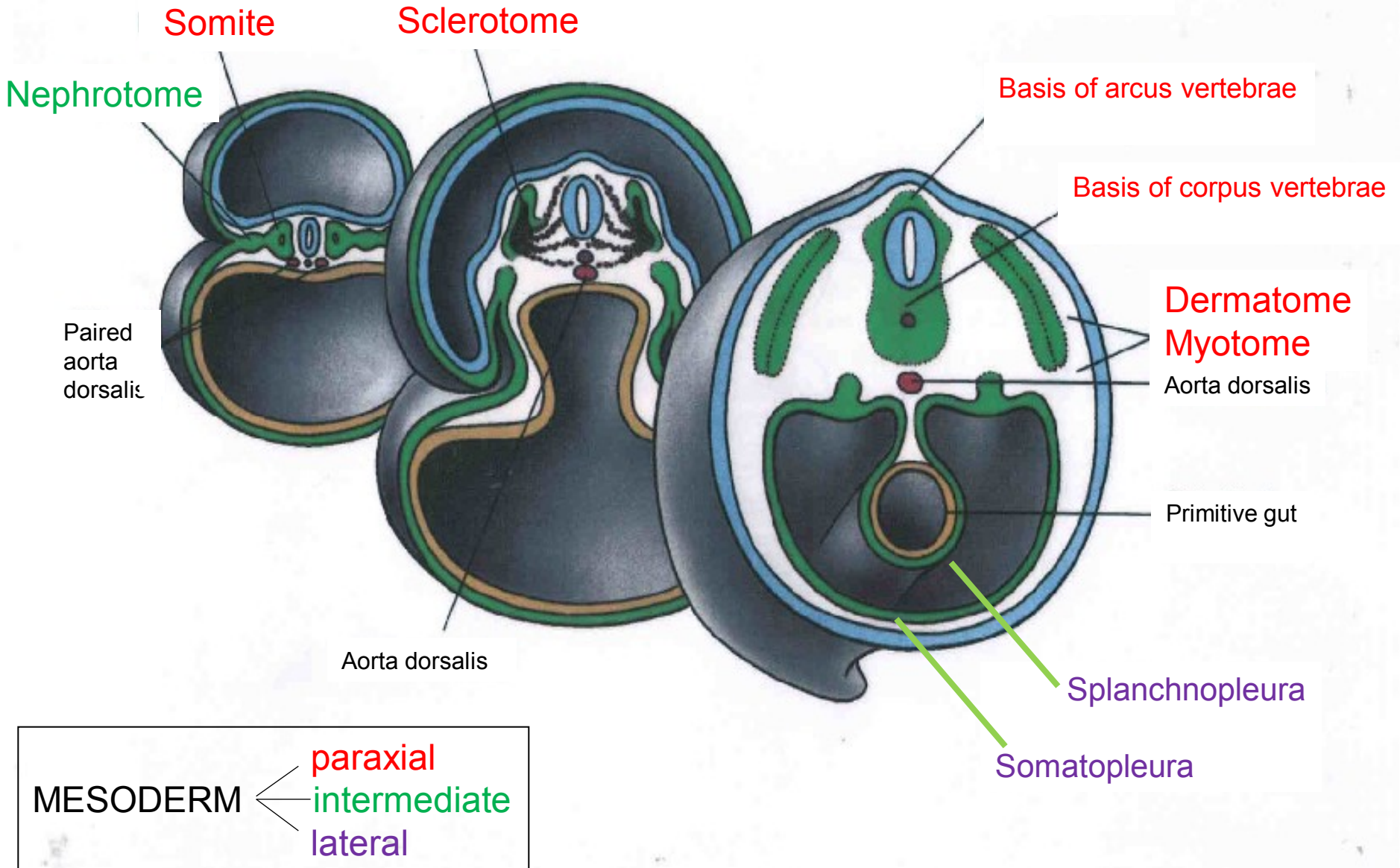


# GERM DISC - DAY 17

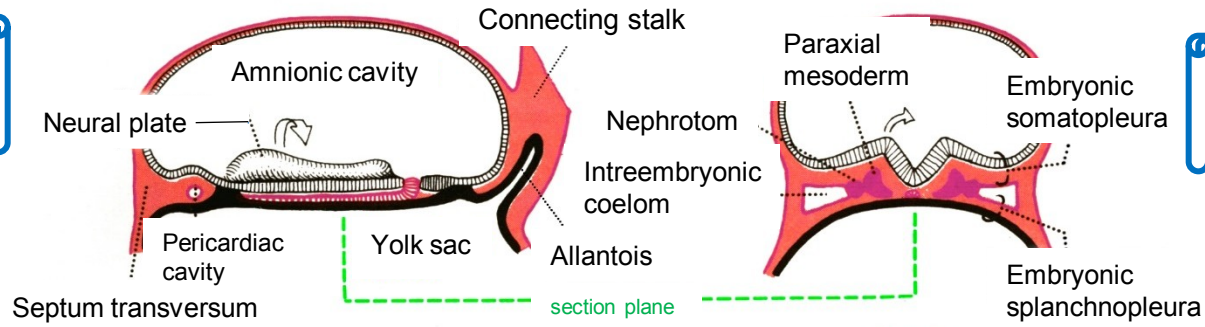


**A** – longitudinal section, **B**, **C** – transversal sections

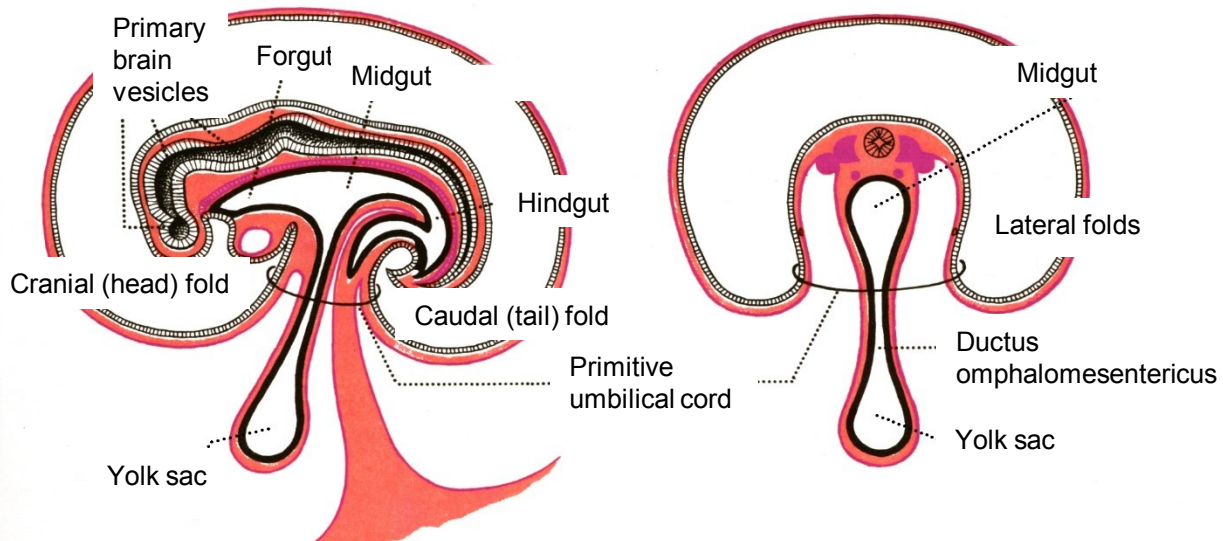
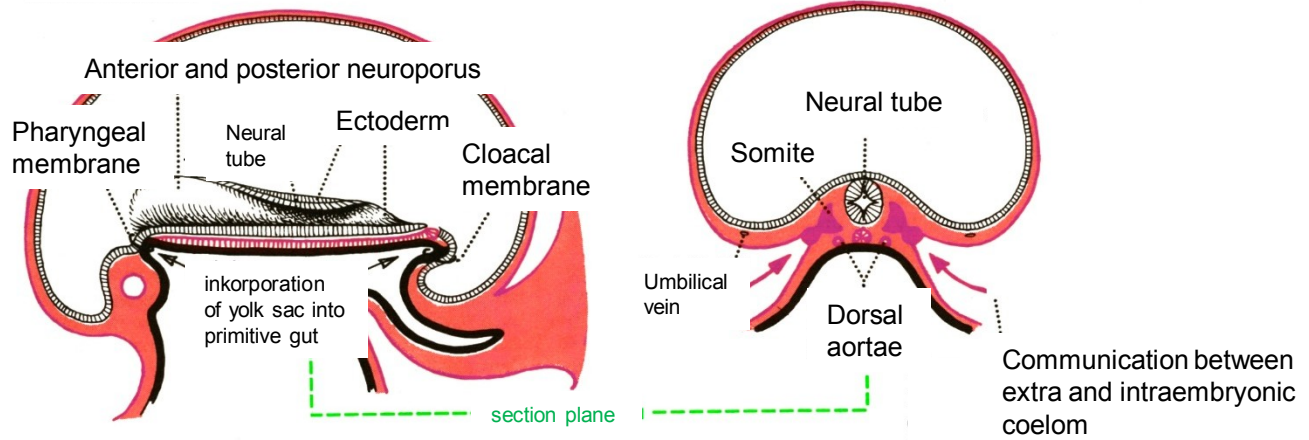
# DIFFERENTIATION OF MESODERM



# EMBRYO



# FLEXION







# EMBRYOLOGY

**Set of embryological pictures I**