

Practice No. 4 - General embryology I

1. Highlight principal differences between mitosis and meiosis, and apply the principles on spermatogenesis and gametogenesis.
2. Describe and graphically schematize development of ovarian follicles and corpus luteum, and link them to the ovarian and menstrual cycles.
3. Describe and graphically schematize the stages of early embryogenesis from fertilization to implantation
4. Describe and graphically schematize development of embryo and extraembryonic tissues in 2nd week of development (identify hypoblast and epiblast)
5. Describe and graphically schematize development of embryo and extraembryonic tissues in 3rd week of development (development of mesoderm and endoderm)
6. Describe and graphically schematize development of chorda dorsalis (notochord), from primitive pit, notochordal process and neurenteric canal (of Lieberkühn).
7. Describe and graphically schematize formation of paraxial, intermediate and lateral plate mesoderm.
8. Describe and graphically schematize flexion of the embryo (grow of the cranial end of embryo, expansion of amniotic sac).
9. Describe and where applicable also graphically schematize development of chorion and amnion, and correctly position the following extraembryonic structures: cytotrophoblast, syncytiotrophoblast, connecting stalk, extraembryonic mesoderm, extraembryonic coelom, primary and secondary yolk sac, and chorionic villi.
10. Insert the embryonic schemes (see Study materials) to your protocol, and label them.

Recommended study materials: Presentation from practice, Presentation from lecture (prof. Hamp), [Atlas of cytology and embryology](#), Langman's medical embryology, Developing human (Moore Keith L.).