

Lab 10: Reproduction & Development

pp. 202-207, 263-279, 280 (questions 1-5, 7-12)

-Next Week (Mon. -4/14- Thurs. 4/17): Field Trip

-Meet on Graham Ave. near Handicapped Parking Lot

-Bring your manual (C69-76) and a pen or pencil

-Wear proper clothing and footwear for walking outdoors – NO OPEN TOED SHOES

GOALS:

- Identify and know function of human male and female reproductive structures using plastic models.
- Identify and know function of the female reproductive structures using the pig uterus specimen.
- State the key differences between human and pig female reproductive structures.
- Identify and state the functions of the extraembryonic membranes using pig fetus specimens.
- Describe the basic stages of animal embryonic development.
- Describe the anatomy of an unfertilized chicken egg.
- Label the four extraembryonic membranes of chick and human on a diagram (p. 251).
- Contrast the location & functions of extraembryonic membranes of humans and chicks (p. 250).
- List physical characteristics present in chick embryo at 24 hr, 48 hr, 72 hr, and 96 hrs of development.
- Identify the age of a chick embryo that has been preserved on a slide (24, 48, 72, or 96 hrs old).
- List key characteristics found in human embryos at 5, 14, 17, and 20 weeks.

KEY TERMS:

Female

ovary
oviduct
uterus
cervix
vagina
clitoris
bladder
urethra

Male

testis
epididymus
vas deferens
bulbourethral gland
urethra
bladder
penis
prostate gland

Pig Uterus & Extraembryonic Membranes (also found in humans)

uterine horn
uterine body
cervix
ovaries
oviducts
placenta
amnion
chorion
allantois
yolk sac

Embryo

zygote
morula
blastula
grastula

Chick development

chorion
amnion
yolk sac
allantois
shell
chalaza
albumen

Chick and Human development

head fold
primitive streak
neural fold
neural tube(groove)
notochord
somites
heart
vitelline vessels
brain
eye
ear
limb buds
tail bud

I. Movie: “The Miracle of Life”:

-Answer questions on handout while you view the movie.

II. Human reproduction:

-pp. 202-207: Read and use diagrams in lab manual. Be able to identify and know function of human male and female reproductive structures using plastic models.

III. Pig uterus:

-View pig uterus demonstration. Take notes &/or listen carefully. Identify and know function of the female reproductive structures using the pig uterus specimen.

IV. Development introduction:

-pp. 263-267: Read section to help understand key terms. You do NOT need to answer questions in your manual for this section.

V. Chick development:

-View the demonstration of living 2-day old chick embryo.

-Open a 4-day old chick embryo following the directions given in class.

-pp. 268-277: Read and look at diagrams. View **slides** of chick embryos at 24 hrs, 48 hrs, 72 hrs, & 96 hrs old. Use reading and diagrams to help you identify the following structures & **determine at which stage they appear:**

24hrs:

48hrs:

72hrs:

96hrs:

VI. Human Development:

-pp. 277-279: View **photos & preserved specimens** representing human embryonic development. Use lab manual to help you determine physical characteristics that are present at each stage.

5 weeks:

14 weeks:

17 weeks:

20 weeks:

VII. Review:

-p. 280: Answer questions 1-5, 7-12.