Female Reproduction Worksheet

- What is the basic organization of the female reproductive system?
- Where are the various organs of the female reproductive structure located? What about coverings?
- What is the primary sex organ of the female reproductive system?
- What are the functions of the primary female sex organ?
- What hormones are in play throughout the female reproductive cycle?
- What is meant by the ovarian and uterine cycles?
- Is the ovarian cycle a 28 day cycle from beginning to end? What about the uterine cycle?
- What is meant by oogenesis? How long does it take? Which organs/structures are involved in the process?
- Stick a pin in the ovary, what layers do you encounter as the pin goes in?
- What is germinal epithelium? Does is have a role in egg production?
- What would you most likely encounter in the cortex of the ovary? The medulla?
- How is the ovary anchored in the abdominal cavity? What structures is the ovary physically connected to?
- What is a primordial or primitive germ cell? Is it diploid or haploid? Where is it located? When?
- What is an oogonia? Is it diploid or haploid? Where is it located? When?
- What cell division process does the oogonia undergo? What is the resulting cell? How many are produced?
- Some germ cells are selected to enlarge and enter meiosis. These cells become? How far do they get in meiosis before they stop? What happens to the other cells not selected?
- What is a primordial follicle? What is the follicle made of? What does it surround (and in what stage)? How long does it remain a primordial follicle?
- How many primordial follicles are present at birth? Still present at puberty? What happens to the rest?
- What is the status of Gonadotropin-Releasing Hormone (GnRH) during childhood?
- What role does estrogen play before menarche? How is GnRH affected by low levels of estrogens?
- How does the status of GnRH change within the 4 years before puberty? How can this be explained?
- As puberty nears, 12-20 primordial follicles with primary oocytes are activated to form a primary follicle. What triggers this activation? What is the role of follicle-stimulating and luteinizing hormones in this transition?
- What is a secondary follicle? What cells make up the secondary follicle? What stage of development is the oocyte in? A receptor begins to appear on the granulosal cells. What kind of receptor is it?
- How does a late secondary follicle differ from a secondary follicle? What is the zona pellucida? What is an antrum? What produces androgens? How are these androgens used?
- What effect does the low levels of estrogens have on GnRH? Granulosal cells also secrete inhibin. What is the role of inhibin in the process?
- What is a dominant follicle? How is this determined? What secretion does the dominant follicle produce and what is the result of this level or chemical on GnRH?
- What is a tertiary/vesicular/graafian follicle? How many granulosal cells now have FSH receptors? What is the status of the antrum? The theca folliculi? What is the corona radiata?
- A full year after 12-20 primary follicles were selected for maturation, the dominant follicle has been selected. On day 14 of this ovarian cycle, luteinizing hormone levels surge. What effect does this have on the follicle and the included primary oocyte? The ovary?
- What is the development of the <u>follicle</u> in the event fertilization does NOT occur? What is the role of each phase? About how long does each phase last?
- Several hormones are produced by the corpus luteum after ovulation. What are the roles of estrogens, progesterone and inhibin in the 14 days of the luteal phase of the ovarian cycle? What happens at day 28 when fertilization does NOT occur?
- What is ejected from the rupturing ovary? Where exactly does it go? What are the layers to the ejected structure? What is the status of the contained oocyte?
- Does the structure ejected contain a mature egg? Where does it go after being released into the peritoneal cavity?

- What is the fallopian/uterine tubes/oviduct? What are the different regions of the oviduct? What are the tissue layers of the oviduct? What is special about the mucosa of the oviduct?
- How long does the oocyte remain in the various areas of the oviducts?
- When the egg leaves the oviduct, where does it go?
- What is the uterus? What is the overall organization of the uterus? What are the tissue layers of the uterus?
- What is special about the stratum basalis and stratum functionalis of the uterus? Assuming it took 5 days post ovulation to reach the uterus, how developed is the stratum functionalis?
- Is the stratum functionalis getting more or less developed in days 20-28? What phase of the uterine cycle has the uterus been in since the LH surge?
- How have the levels of estrogens and progesterone changed from the LH surge until day 28?
- What happens to the stratum functionalis after day 28? How long does it last? What is this phase called?
- After the menstruation occurs, what phase does the uterus enter? What is happening? How long does this phase last? What are the levels of estrogen and progesterone like during this phase?
- Assuming the egg was not fertilized upon ovulation, when and how does it leave the female reproductive structures?
- How do items leave the uterus? What structure does it then enter?
- How would the cervix function in the female reproductive system?
- What is the overall structure of the vagina?
- What are the tissue layers of the vagina?
- What is the opening to the vagina from the external environment? Is it ever covered? If so, by what?
- What is the vestibule? What external structures are contained within the vestibule?
- What internal structures are located just beneath the area defined by the vestibule? What are their functions?
- What are the labia minora? What external structures are contained within the confines of the labia minora?
- What surrounds the labia minora?
- What is the complete structure of the clitoris and what function does each part have? How are these structures different to that of male anatomical structures?
- What is the perineum?
- What is the external organization of the female breast? What internal structures are present, when not pregnant, to support the breasts and to allow for the shape of the breast?
- Lobules contain alveoli. What is the purpose of alveoli in the breasts?
- How is alveolar secretion carried through the lobe to the lactiferous sinus? What role does the lactiferous sinus have in nursing?
- Where does the lactiferous duct finally end?
- When would the breast become so highly developed? What about the rest of the time?
- What is breast cancer? What causes it? How is it diagnosed? How is it treated? How successful is treatment?
- Overview: The structure and function of the female reproductive organs, both internal and external.
- Overview: Follicular and oocyte development from conception to regular menses.
- Overview: Stages of mitosis and meiosis and which cells do which process.
- Overview: The ovarian cycle
- Overview: The uterine cycle
- Overview: Hormones of the female reproductive structures
- Overview: Tie the hormonal events, the ovarian cycle and the uterine cycle together for a 28-day cycle.
- Overview: Diseases, disorders and infections of the female reproductive system.