

Cow and Bull Reproduction Student Notes – Answer Key

Name _____

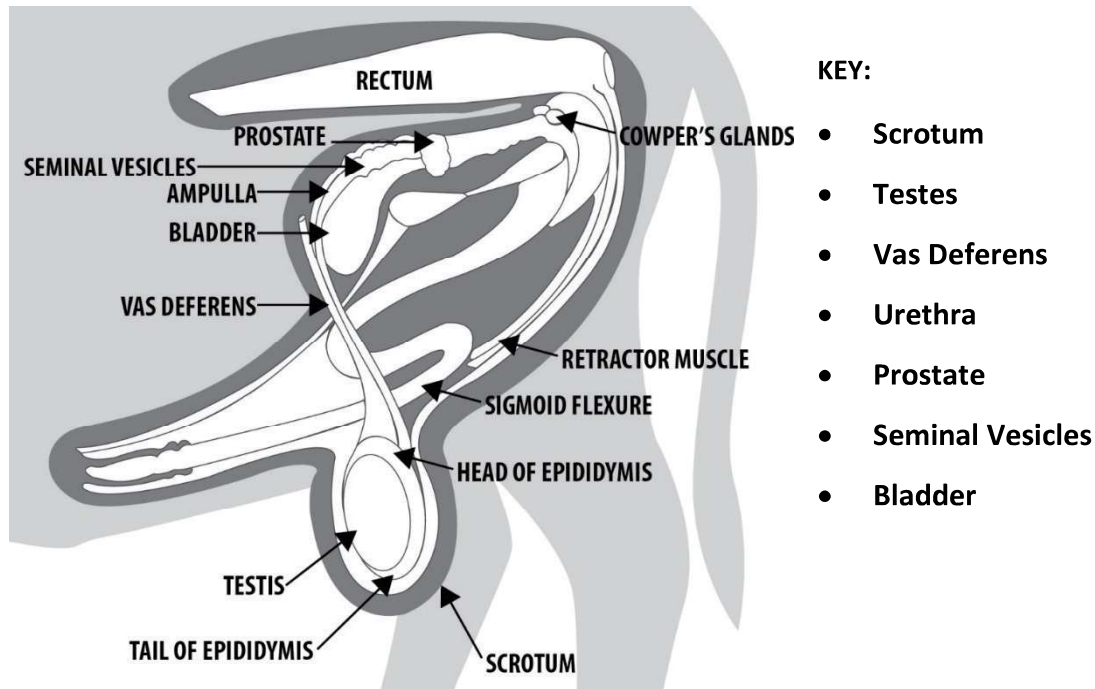
1. Define the following:

- a. Puberty: Sexual maturity
- b. Ovulation: Release of ovum (egg) from ovary
- c. Copulation: The act of mating
- d. Fertilization: Union of male and female sex cells
- e. Conception: Becoming pregnant
- f. Estrous Cycle: Time between when animal is in heat; the entire cycle
- g. Estrus: Actual time animal is in heat, receptive to fertilization
- h. Gestation: Pregnancy
- i. Parturition: The act of giving birth

2. Complete the chart for each of the following farm animals:

Animal Estrous	Estrous Cycle Length	Estrus Length	Gestation
a. Bovine	19-21 days	15 hours	9 months
b. Canine	6-12 months	2-4 weeks	2 months
c. Equine	19-21 days	5-7 days	11 months
d. Feline	14-21 days	1-7 days	2 months

3. Label the following diagram for male reproductive parts:

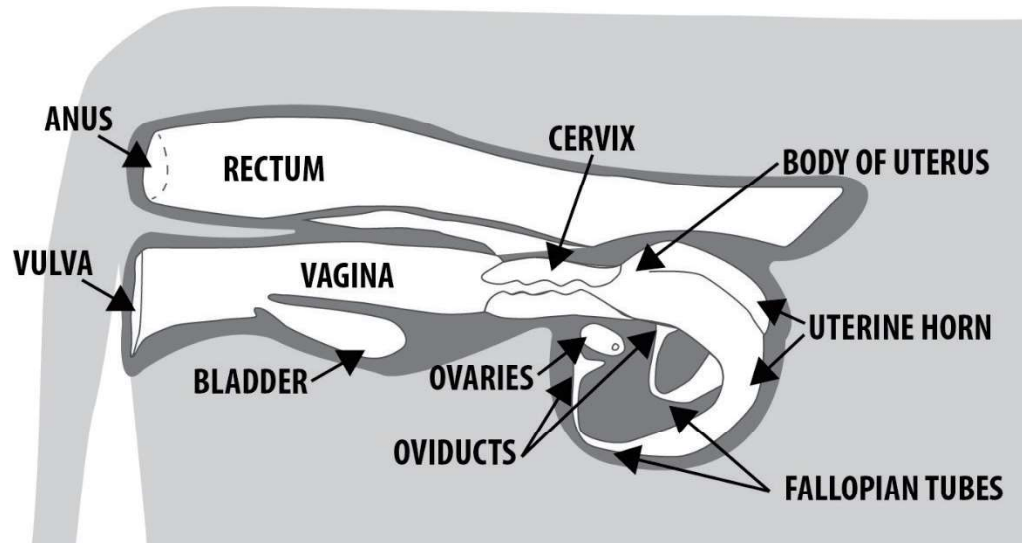


4. Define the following male reproductive terms:

- Scrotum: Container for the testes external to the body; functions in temperature regulation
- Testes: Paired within the scrotum, sperm production factory
- Epididymis: Long slender tubule encased- lying along surface of the testes, tight storage, sperm packed so can't swim
- Vas deferens: Simple tubule carrying sperm from the epididymis to ampulla or urethra, by peristaltic action
- Ampulla: Widened area at juncture of vas deferens and urethra for sperm storage prior to ejaculation; not found in all species
- Urethra: Single tubule leading from vas deferens through penis to exit
- Sigmoid flexure: Curvature in penis structure of bull & boar allowing for extension to mate
- Retractor muscle: Pulls penis back into normal position following elongation
- Accessory Glands: (Cowper's and Prostate) glands associated with the male reproductive tract to provide fluids for nutrient source, volume, and protection of the sperm

- j. Prostate: Gland surrounding the neck of the bladder in male mammals and releasing prostatic fluid
- k. Cowper's: Small glands that open into the urethra at the base of the penis and secrete a constituent of seminal fluid

5. Label the following diagram for female reproductive parts:



KEY: Anus Vulva Vagina Cervix Uterus Oviducts Ovary

6. Define the following female reproductive terms:

- a. Parturition: The act of giving birth
- b. Vagina: Structure external to the cervix; accepts penis of male for mating, birth canal
- c. Vulva: Consists of the external genital organs of a female
- d. Cervix: Muscular opening between uterus and vagina; remains reasonably constricted except for relaxation to allow birth
- e. Uterus: Body of uterine structure between cervix & horns; site of implantation
- f. Oviducts: Tubules connecting infundibulum to the uterine structure; site of fertilization
- g. Infundibulum: Associated with each ovary; captures the ova after ovulation
- h. Ovaries: Structure containing the reproductive cells (ova); paired