

REVIEW SHEET REPRODUCTION AND DEVELOPMENT

- 1) Compare external and internal fertilization.
- 2) Distinguish between spiral (protostomes) and radial cleavage (deuterostomes).
- 3) List the stages of development of a frog egg and describe features of each of these stages.
- 4) Identify various structures within the larval frog. Nervous system, circulatory system, and digestive system.
- 5) Compare the larval and adult stages of *Xenopus*. What are the advantages to this form of metamorphosis?
- 6) Which structures were you able to identify in the chicken embryo?
- 7) Very briefly describe the membranes surrounding the developing embryo.
- 8) Be able to identify the notochord, and spinal cord in a cross section.
- 9) Identify seminiferous tubules, spermatogenic cells, spermatozoa, interstitial cells, epididymis and vas deferens.
- 10) Identify the ovaries, oviduct, uterus, vagina, primary follicle, growing follicle, mature follicles, ovum, and corpus luteum.

For questions 9 & 10 it might be helpful to include drawings on this page.

Rat:

Oogenesis: Primary follicle > mature follicle > ruptures > oocyte released > corpus luteum remains.

Spermatogenesis: Spermatogenic cells in seminiferous tubules, interstitial cells secrete testosterone > epididymis > vas deferens > urethra .

Internal Features: (visible after dissecting the rat).

Female Reproductive System	Male Reproductive System
Ovaries	Scrotum
Uterus	Testes
Vagina	Epididymis
	Vas deferens
	Seminal vesicle
	Penis
	<u>Spermatogenesis</u>
	Seminiferous tubules
	Spermatogenic cells
	Interstitial cells secrete testosterone