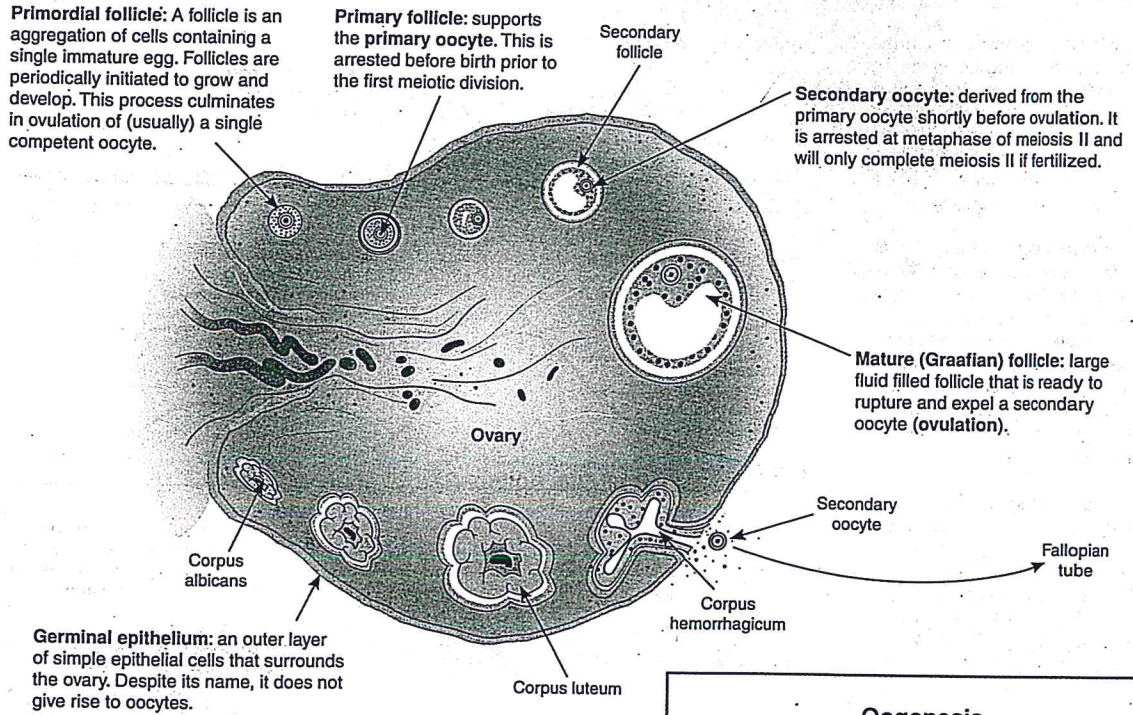


Oogenesis

The production of egg cells (ova) occurs by oogenesis. Unlike spermatogenesis, no new eggs are produced after birth. Instead a human female is born with her entire complement of immature eggs. These remain in prophase of meiosis I throughout childhood. After puberty, most commonly a single egg cell

is released from the ovaries at regular monthly intervals (the menstrual cycle). This cell is arrested in metaphase of meiosis II and its second division is only completed upon fertilization. The release of egg cells from the ovaries takes place from the onset of puberty until menopause, when menstruation ceases.

Development of the Ovarian Follicle and Egg Cell within the Ovary



- (a) Name the process by which mature ova form:

(b) Name the place(s) where this takes place:

- Discuss the main differences between the production of male gametes and female gametes:

- Explain why males can be potentially fertile all their life, while female fertility decreases and eventually ceases with age:

