

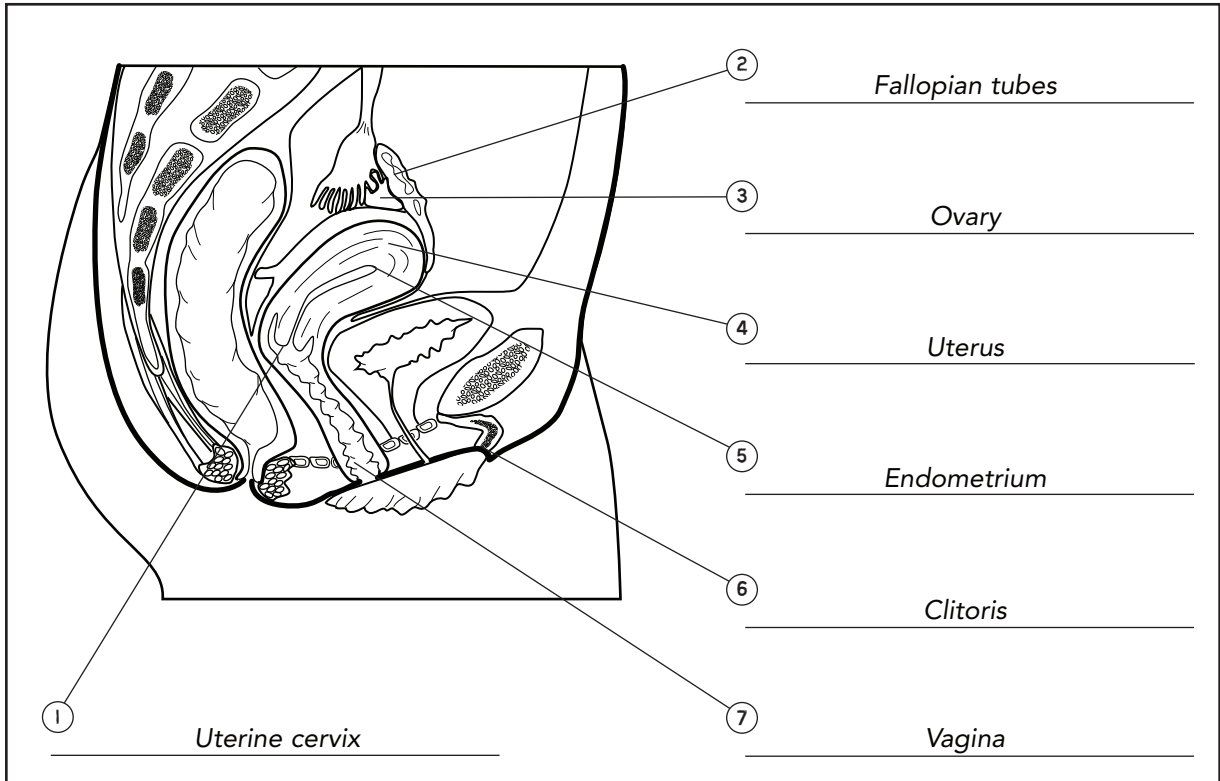
CONCEPT REVIEW  
**23**

# THE FEMALE REPRODUCTIVE SYSTEM

PAGES 143 TO 148

Complete this concept review handout and keep it as a record of what you have learned.

## ANATOMY OF THE FEMALE REPRODUCTIVE SYSTEM



## DEFINITIONS

- Oogenesis is the process of ovum production by meiosis.  
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- The ovarian cycle is the process whereby a single ovarian follicle matures (in order to release an ovum) and changes into a corpus luteum (in order to encourage the implantation of the ovum in the uterus).  
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- The menstrual cycle represents all of the periodic changes in the uterine endometrium.  
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## THE FEMALE REPRODUCTIVE SYSTEM

### Oogenesis and the ovarian cycle, based on a 28-day cycle

Period	Event	Hormones
Days 1 to 12	<ul style="list-style-type: none"> <li>- <i>An ovarian follicle develops.</i></li> <li>- <i>An oocyte undergoes meiosis I.</i></li> </ul>	<ul style="list-style-type: none"> <li>- <i>The pituitary gland secretes a greater quantity of FSH.</i></li> <li>- <i>The ovarian follicle secretes more and more estrogens.</i></li> </ul>
Days 13 and 14	<ul style="list-style-type: none"> <li>- <i>The ovarian follicle wall bursts.</i></li> <li>- <i>The oocyte is expelled (ovulation).</i></li> </ul>	<p><i>The pituitary gland secretes LH in greater quantities as well as more FSH (hormonal surge).</i></p>
Days 15 to 28	<ul style="list-style-type: none"> <li>- <i>The ovarian follicle is transformed into the corpus luteum.</i></li> <li>- <i>The oocyte moves into one of the fallopian tubes.</i></li> <li>- <i>The oocyte undergoes meiosis II.</i></li> <li>- <i>If the ovum is not fertilized, the corpus luteum deteriorates.</i></li> </ul>	<ul style="list-style-type: none"> <li>- <i>The corpus luteum secretes progesterone, inhibiting the production of LH and FSH.</i></li> <li>- <i>As the corpus luteum deteriorates, progesterone production decreases, while FSH production increases.</i></li> </ul>

### 28-day menstrual cycle

Phase	Event	Hormones
Days 1 to 5 Menstrual phase	<i>Bleeding occurs, due to the expulsion of the endometrium and unfertilized ovum.</i>	<i>Progesterone production decreases.</i>
Days 6 to 14 Proliferation phase	<i>Endometrium begins to thicken.</i>	<i>Production of estrogens by a new ovarian follicle increases.</i>
Days 15 to 28 Secretory phase	<i>Endometrium continues to thicken.</i>	<i>Secretion of progesterone by the corpus luteum increases.</i>