

The Menstrual Cycle

OBJECTIVE / RATIONALE

Menses is an important aspect of the female reproductive cycle. The student will be able to identify and discuss the phases of a typical 28-day menstrual cycle.

TEKS 121.13 (c) 11B

TAKS ELA 1
Mathematics 3, 4
Science 2

National Science Standards A9-12; C9-12; F9-12; G9-12

National Health Care Skills Standards .07

National Math Standards S2; S5; S10

KEY POINTS

1. Menstrual cycle - cyclic changes in the uterus, ovaries, vagina, and breasts
2. Menses
 - a. Time of the first is menarche.
 - b. Time of the last menopause.
3. Normal range - 18 to 40 days (65% of women have a cycle between 25-31 days)
4. Phases
 - a. menstrual phase (menses; menstruation)- Days 1-5
periodic discharge (13-300 ml) of blood, tissue fluid, mucus, and epithelial cells from the uterus, through the cervix, and vagina.
 - b. preovulatory phase (follicular)- Days 6-13
time between menstruation and ovulation; rise in estrogen (from the ovary) repairs the uterine lining; there is an increase in FSH (follicle stimulating hormone, secreted by the pituitary gland) and LH (luteinizing hormone, secreted by the pituitary gland) causing ovulation.
 - c. postovulatory phase (secretory)- Days 15-28
time between ovulation and the onset of the next menses; rise in progesterone (from the ovary) and the second rise in estrogen prepares the uterus for possible implantation of the fertilized egg

ACTIVITIES

- I. Prepare a timeline of the typical 28-day menstrual cycle. Include hormonal activity and ovulation and uterine changes.

MATERIALS / RESOURCES

The following Internet sites will provide useful information:

1. www.fda.gov/opacom/catalog/ots_mns.html
2. www.matweb.hcuge.ch/matweb/endo/Lectures_8th_PGC/CYCLE/ppframe.htm
3. www.people.virginia.edu/~rjh9u/mescyc2.html
4. <http://ataschool.eduweb.co.uk/middlecrof.bmenstru.htm>
5. www.medscand.com/cytofocus/menstral.htm
6. http://my.webmd.com/content/dmk/dmk_article_4006
7. [http://healthwatch.medscape.com/medscape/p/G_Library/article.asp?ReclD=2025618
ContentType=Library](http://healthwatch.medscape.com/medscape/p/G_Library/article.asp?ReclD=2025618&ContentType=Library)

ASSESSMENT

Project Rubric

ACCOMODATIONS

For reinforcement, the student will research and report on the factors that alter a normal menstrual cycle.

For enrichment, the student will review literature on current research regarding hormone replacement.

REFLECTIONS
