THE MENSTRUAL CYCLE

**Menstruation**

Menstruation, or having periods, begins during puberty. For most girls, periods start sometime between ages 9 and 16. The average age to start is 12 to 13.

The **menstrual cycle** is the monthly cycle of changes that happens in the female reproductive system. During the menstrual cycle, an egg develops in an ovary. At the same time, the uterus prepares for the arrival of a fertilized egg. Because each body is different, the time it takes to complete one menstrual cycle is different between different women. Cycles vary from 20–40 days. The average cycle is 28 days.

The menstrual cycle has 4 main stages:

**Stage 1: Menstruation**

This is the time of bleeding, or the *period*. The inner lining of the uterus (the endometrium) flows out of the body through the vagina. Periods usually last between 3 to 7 days. About 4 tablespoons of fluid leaves the uterus during a period. The first day of a woman’s period is considered “Day 1” of her menstrual cycle.

**Stage 2: Egg Ripening and Uterus Lining Buildup**

This phase begins when the period is over. As the egg matures, the lining of the uterus gets thicker. This takes 6 to 12 days.

**Stage 3: Ovulation**

This is the midpoint of the menstrual cycle. Hormones cause the chamber around the egg (called the follicle) to break open and release the mature egg into the fallopian tube. This is called **ovulation**. Now the woman can become pregnant. Ovulation usually occurs on Day 14 of a woman’s menstrual cycle. Some women experience slight discomfort, such as cramps, during ovulation.

**Stage 4: Egg Travels to Uterus**

This is the most stable part of the menstrual cycle. It last about 14 days for most women. During this stage, the uterus is ready to receive a fertilized egg. The egg usually takes 3 to 4 days to reach the uterus. If the egg has been fertilized by a sperm cell, it attaches to the thick, blood-filled lining of the uterus. This is the start of **pregnancy**. If an egg is not fertilized, the egg and the lining of the uterus breaks down. The extra blood and tissue of the uterus begins to pass out of her body through the vagina, and the woman begins her period.

**Menopause**

A woman’s menstrual cycle continues during the years that she can reproduce, except during pregnancy, when she has no periods. This is because the uterus lining must stay thick and healthy for 9
months while the fetus is developing inside it. Menstrual cycles eventually stop, usually between the ages of 45 and 55. When her periods stop, a woman has reached a stage called **menopause**.

**Staying Healthy**

Menstruation is a normal, healthy part of a woman’s life. Girls can do everything they usually do while they are menstruating, such as exercise, swim, and bathe. Here are some tips to stay healthy:

- Some girls and woman experience cramps the first day of their periods. These can be dull, achy pains in the stomach area. They can also be sharp and painful.

- You can prevent or minimize cramps by exercising regularly, eating a well-balanced diet, and getting enough sleep. Using a heating pad on your stomach area and taking some regular pain reliever medications can also help. If cramps are severe, see your doctor.

- If you use tampons when you are menstruating, change it every 3-4 hours. If it is more comfortable, consider wearing a pad at night.

- Practice good hygiene by showering or bathing daily with mild soap.

**REVIEW - THE MENSTRUAL CYCLE**

<table>
<thead>
<tr>
<th>Word Bank</th>
</tr>
</thead>
<tbody>
<tr>
<td>menstrual cycle</td>
</tr>
<tr>
<td>___ days</td>
</tr>
</tbody>
</table>

1. **Fill In The Blanks**

   In the menstrual cycle, the ________ releases an _____________ every _____________. Each time an egg is released, the _____________ must prepare itself for a fertilized egg. A thick lining full of _________________ slowly develops. If the egg is fertilized, it passes into the uterus and attaches itself to the uterus wall. If the ovum is not fertilized, it passes out of the uterus. The uterus lining will begin to break down and exit through the vagina. This process is called ________________, otherwise known as a “__________”. The menstrual cycle allows the uterus to grow a fresh lining every time a(n) ________ is released to provide fresh and healthy conditions for the growing embryo.
2. **Interpreting A Diagram**

Look at the diagram. For each sentence below it, write the matching letter from the diagram in the box.

![Diagram with labels A, B, C, D, and timelines Day 1, Day 3-7, Day 14, Day 28]

<table>
<thead>
<tr>
<th>Description of Events</th>
<th>Letter</th>
</tr>
</thead>
<tbody>
<tr>
<td>The uterus lining is thick and waiting for a fertilized egg.</td>
<td></td>
</tr>
<tr>
<td>The uterus lining begins to gradually thicken up again.</td>
<td></td>
</tr>
<tr>
<td>The egg is released by the ovary (ovulation).</td>
<td></td>
</tr>
<tr>
<td>The released egg is traveling down the fallopian tube to be fertilized.</td>
<td></td>
</tr>
<tr>
<td>The thick lining of the uterus breaks down and flows out slowly.</td>
<td></td>
</tr>
<tr>
<td>(Challenge) A woman is fertile during this period only</td>
<td></td>
</tr>
</tbody>
</table>

3. **Short Answer Questions**

1. What starts on Day 1 of the menstrual cycle?

2. Approximately how long does it take the uterus lining to build up again after menstruation?

3. Why is it necessary to build up the uterus lining every month, again and again?

4. Why do you think it is a good thing that a woman’s menstrual cycle stops around the ages of 45-55 (called menopause) and she can no longer produce children?