

Cycle of Life – Answer Sheet

Puberty is the term used to describe the changes that your body begins to experience between the ages of 10 and 17. Some people will experience these changes at an earlier or a later age. These changes include physical growth, the development of pubic hair and in females, getting a period.

Puberty is controlled by hormones, **estrogen** and **progesterone** in females and **testosterone** in males. Hormones are chemical messengers inside the body that cause changes externally and internally.

The **eggs** are produced in the **ovaries**. A female is born with two ovaries that contain approximately 1-2 million egg cells. By puberty, the two ovaries contain about 400,000 immature egg cells. **Ovulation** is the word used to describe when a mature egg (ovum) is released and enters one of the two **fallopian tubes**. For a few days the egg cell travels toward the pear-shaped **uterus**. The lining of the uterus (endometrium) thickens in preparation for a fertilized egg.

If the egg has not been fertilized by a **sperm** cell it will leave the body together with the lining of the uterus and a small amount of blood. This process is called **menstruation**. The length of time from the beginning of one menstrual cycle to the beginning of the next cycle is, on average, twenty-eight days. The menstrual cycle begins on the first day of a girl's period. Often, when a female gets her period, she experiences feelings of discomfort, such as cramping. These feelings will vary from person to person and may be alleviated by mild exercise, a hot water bottle, a warm bath, a heating pad ... Talk to your doctor about medication if cramps really bother you.

During intercourse, sperm are ejaculated into the vagina. Sperm travel through the cervix into the uterus and up to the fallopian tubes. Many sperm cells may meet the egg, however, only one sperm cell will penetrate the egg's surface. This process is called **fertilization**. The **embryo** (sperm and egg cell joined together) makes its way through the fallopian tube towards the uterus. The embryo then embeds itself deep into the **endometrium** (lining of the uterus) in a process called **implantation**.

If the embryo successfully implants, then the menstruation does not occur and the female **misses** her period. This is, perhaps, the first sign that she is **pregnant**. Pregnancy is measured from the **first** day of the last menstrual period. When a fetus is at term (fully grown) forty weeks have passed since that day (10 months, not nine!).