Reproductive System Notes –

Obj 57: I can identify and explain the reproductive system of males and females

1. **Functions of the Reproductive System:**
2. Allows the survival of the human species
3. Produces, stores, nourishes and releases sex cells which are called \_\_\_\_\_\_\_\_\_ in males and \_\_\_\_\_\_\_\_\_\_\_ in females.
4. **Major Reproductive Structures:**
5. In **females** all the reproductive organs are found inside the body
6. \_\_\_\_\_\_\_\_\_\_\_\_- the primary female reproductive organ that produces eggs.
7. \_\_\_\_\_\_\_\_\_\_\_\_- eggs travel through these to reach the womb.
8. \_\_\_\_\_\_\_\_\_\_\_\_- a hollow, muscular organ in which the fertilized egg develops
9. \_\_\_\_\_\_\_\_\_\_\_\_- the passageway through which a baby travels at birth.

**Notes**: Females are born with all the eggs they will need – females do not produce more eggs in adolescence. The ovaries (along with producing eggs) produce the female hormones \_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_ which trigger the development of female characteristics – broadening of the hips, development of breasts, body hair, menstruation, etc.



1. In **males** some of the reproductive organs are inside the body and some are external.
2. \_\_\_\_\_\_\_\_\_\_\_\_- the primary male reproductive organ that produces sperm.
3. \_\_\_\_\_\_\_\_\_\_\_\_- the external organ through which sperm (and urine) travels.
4. \_\_\_\_\_\_\_\_\_\_\_\_- the pouch or sac that holds the testes.

**Notes**: At puberty, males begin producing sperm and they will continue to do this all their life. The testes (along with producing sperm) produce the male hormone \_\_\_\_\_\_\_\_\_\_\_\_\_ which triggers the development of male characteristics – facial and body hair, muscle development, deepening of the voice, spermatogenesis, etc.

**3. The Menstrual Cycle:**

1. The menstrual cycle is a cycle of change that takes about \_\_\_\_\_\_\_days.
2. The menstrual cycle is controlled by \_\_\_\_\_\_\_\_\_\_\_from the endocrine system.
3. The cycle – for the first 12-14 days of the cycle the uterus prepares itself for a fertilized egg. The lining of the uterus grows thick and soft. On about the 14th day, **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** occurs. This is the release of a mature egg from the ovary. If **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** (the joining of the egg with a sperm) occurs, the fertilized egg or **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** will implant itself in the thick, soft lining of the uterus. If fertilization does not occur, the lining of the uterus breaks down and is passed out through the vagina in a process called menstruation (or having your “period”).

**Objective 58: I can describe the stages of development before and after birth**

**4. Stages of Development before Birth:**

1. The first stage of development is when the sperm cell and egg cell join to form the \_\_\_\_\_\_\_\_\_\_\_. This cell then divides and divides and the stage lasts for about 4 days while the zygote is traveling from the fallopian tube (where fertilization occurred) to the uterus where the baby will develop for the next \_\_\_\_\_\_\_ months.
2. The next stage lasts for the next eight weeks and the baby is called an \_\_\_\_\_\_\_\_\_\_ during this stage. Soon after the zygote enters the uterus it attaches itself to the wall and begins to grow. During this time the \_\_\_\_\_\_\_\_\_\_\_sac and \_\_\_\_\_\_\_\_\_\_ develop.

The placenta provides a connection between the developing baby and the mother. Food and oxygen pass in through the placenta to the baby and wastes pass out.

1. After eight weeks of development the baby is about the size of a walnut and it is now called a \_\_\_\_\_\_\_\_\_\_. At this stage the baby is beginning to look like a human. At three months most of the internal organs are developed and the baby has grown arms, legs, fingers and toes. During the 4th, 5th, and 6th months the skeleton begins to form and a heartbeat can be detected. During the last three months the lungs become fully developed and the baby’s weight quadruples. The baby is ready to be born after nine months.

**5. Stages of Development after Birth:**

1. \_\_\_\_\_\_\_\_\_\_\_\_- from birth to two years old – the baby grows rapidly in size, mental and muscular skills begin to develop.
2. \_\_\_\_\_\_\_\_\_\_\_\_- from about 2 to about 13 years old – mental abilities increase, memory is strengthened, muscular, language and learning skills develop.
3. \_\_\_\_\_\_\_\_\_\_\_\_- from about 13 to about 20 years old – this stage begins a puberty when the sex organs develop to maturity. Menstruation starts in females and males begin to produce sperm. Children in this stage go through a rapid growth spurt and develop male and female characteristics.
4. \_\_\_\_\_\_\_\_\_\_\_\_- from about 20 to death – all body systems are mature and full height and weight have been reached. Between the ages of about 40 and 60 females go through **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** when they are no longer able to reproduce.