

## THE MALE REPRODUCTIVE SYSTEM: HOW DOES IT WORK?

On your diagram of the male anatomy, label and colour the internal and external organs according to the instructions below. Vocabulary words that need to be written on the diagram have been *italicized*.

Start at the lower right hand side of your diagram. This special sac that houses the two *testicles*, is called the *scrotum*. Colour the scrotum in blue pencil crayon. The *scrotum* is a sac of loose skin divided into two parts. Each part contains a *testicle*, *epididymis* (the small kidney shaped gland at the top of the scrotum), and the end of the *vas deferens*. Label the three words *epididymis*, *testicle*, and *scrotum* at the lower right hand side of your diagram. Colour the *epididymis* purple. Each testicle contains tiny tubes that are continuously creating sperm throughout a man's life. When puberty occurs, sperm move to the *epididymis* to mature.

The *vas deferens* allows the sperm to move up to the *seminal vesicle*. Follow the *vas deferens* tube up to the top of the diagram. Colour the entire *vas deferens* dark green, but be sure to stop colouring as the *vas deferens* tube enters the penis.

The large egg-shaped organ in the centre of your diagram is the *bladder*. This organ stores urine until it can be expelled from the body. It is not considered part of the reproductive system. Label the *bladder*, but leave it uncoloured.

As the *vas deferens* curves around the top of the bladder and back down again, it passes the *seminal vesicle*. This gland is oblong-shaped, and is located behind the bladder on your diagram. The *seminal vesicle* produces fluids that activate sperm. Colour it light blue.

The *prostate gland* is located just below the bladder. It supplies most of the liquid that combines with the sperm prior to ejaculation. When a man is sexually aroused to the point of orgasm, the fluid from the *prostate gland* combines with the sperm to make semen. Strong muscle contractions in and around the *prostate gland* contract rapidly to force the semen out of the *urethra*. Colour the *prostate gland* orange.

Just under the prostate gland rests a very small round gland called the Cowper's gland. This gland secretes a fluid that removes any acidity from the urethra just before ejaculation. This ensures that the sperm have the best chance of living!

The tube leading from the various glands down the length of the *penis* is called the *urethra*. The *urethra* is the special passageway that allows urine to be voided from the bladder, and allows semen to travel out of the body during sexual intercourse. Both urine and semen cannot be in the *urethra* at the same time. During an erection, a small valve at the entrance from the bladder seals it off. Colour the *urethra* light green.

The organ in which the *urethra* is housed is called the *penis*. The *penis* has spongy tissues containing small blood vessels and nerves. During sexual arousal, the spongy tissue fills with blood, and the penis hardens. This is called an erection. An erection is a necessary part of human reproduction. It allows the man to insert his penis into the woman's vagina, which enables semen to reach the egg inside the woman's reproductive system.

At the very tip of the penis is the *glans*, which is the head of the penis. This part of the male reproductive system may or may not be covered by *foreskin*. If the male is circumcised, the foreskin will not cover the *glans*. Some parents may choose not to circumcise their son, while other parents do. Colour the area of the *glans* yellow.



## THE FEMALE REPRODUCTIVE SYSTEM: HOW DOES IT WORK?

On your diagram of the female anatomy, label and colour the internal and external organs according to the instructions below. Vocabulary words that need to be written on the diagram have been *italicized*.

Start with the diagram at the top of the page. The outer fold of flesh that covers a female's vagina is called the *labia majora*. This outer fold is larger than the inner fold and has hair growing on it. The inner fold, called *labia minora* is made up of mucous membranes. Both of these folds help protect the vagina and urethra. The urethra is a small tube that carries urine outside the body from the bladder. The opening for the *urethra* is just below the clitoris and above the vagina. The *vaginal opening* leads to the vagina. The vagina is the passage leading from the uterus to the outside of the body. The *clitoris* is a small, sensitive bump located where the folds meet at the top front part of a female's pubic area. Between the buttocks is an opening called the *anus*. This is where feces come out of the body.

Now look at the diagram in the middle of the page. The opening leading up into the internal reproductive system is called the *vagina*. The *vagina* is a soft, muscular elastic tube. Its inner lining is soft and moist. During sexual arousal, the walls of the *vagina* secrete a lubricant to assist in intercourse. The vagina also functions as the birth canal for a baby, and allows menstrual flow to exit the body from the uterus. Colour the *vagina* dark blue.

The *uterus* is a pear shaped organ about the size of a woman's fist that stretches to house the baby, placenta and amniotic fluid during pregnancy. It is very strong, muscular and stretchable! Colour the *uterus* pink.

At the top of the *vagina* is the *cervix* which is the bottom of the *uterus*. This is slightly open in women who are not pregnant, but is plugged during pregnancy to avoid infection. When a baby is ready to be born, the *cervix* opens to a diameter of 10 cm. Colour the *cervix* purple.

The thick tissue inside the entire uterus is the *uterine lining*. If fertilization does not occur, this lining is shed every month. This is called menstruation, the process by which the uterus rids itself of its old lining, and prepares for the possibility of conception the following month. About 14 days after ovulation, the body begins to shed the uterine lining, which is made up of blood and fluid. This is commonly called a "period". Colour the *uterine lining* red.

Follow the tube out of the uterus to the right on your diagram. This is called the **fallopian tube**. The **fallopian tube** carries the egg from the **ovary** down to the **uterus**. This journey usually takes about three days. Usually, conception (joining of the sperm and egg) occurs in the **fallopian tube**. Colour both **fallopian tubes** on the diagram orange.

The finger-like structures at the end of the fallopian tube are called **fimbria**. The internal, very tiny hair like structures inside the **fallopian tube** are called **cilia**. The cilia help the egg move down the **fallopian tube** from the **ovary**.

Two egg-shaped organs on either side of the uterus are the **ovaries**. These are the female counterparts to the male testicles. An **ovary** is about the size of an almond. When a woman is born, the ovaries already contain all the ova (eggs) she will ever produce. There are up to 400,000 ova. Unlike the testicles, **ovaries** only house eggs. They don't produce them. The ovary releases one ovum (a single egg) each month. This process is called ovulation. When the **ovary** releases the egg it travels down the fallopian tube, with help from cilia. If a sperm does not fertilize the egg, it will not adhere to the uterus wall. As a result, menstruation will occur. Colour each ovary light brown, and label your diagram on the left side.

# Female Reproductive System

