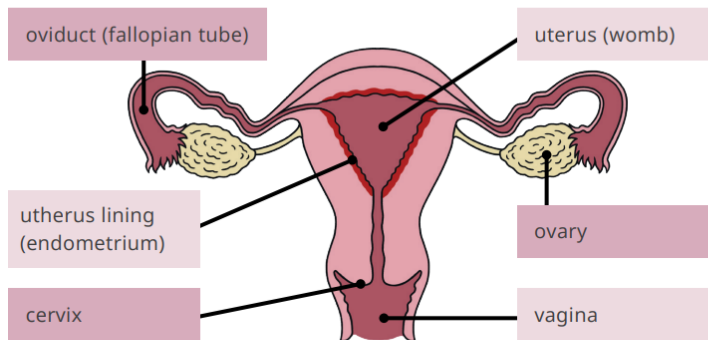


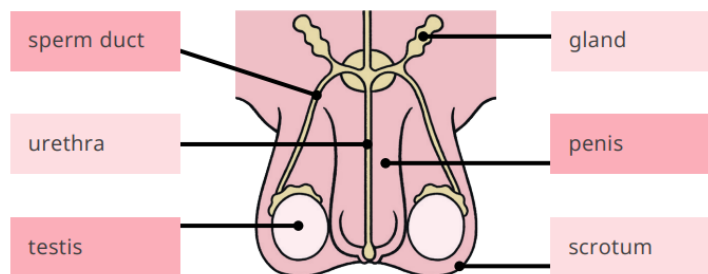
The Menstrual Cycle

Day	Description
1-5	The uterus lining breaks down and passes out of the vagina. This is known as menstruation or 'having a period'.
5-14	The uterus lining starts to build up again. An egg cell starts to mature in the ovary.
14	An egg cell is released from the ovary. This is called ovulation.
14-28	The uterus lining remains thick. During this time, the egg may be fertilised by a sperm cell.
28	If the egg cell is not fertilised by a sperm cell, the uterus lining begins to break down again and the cycle repeats.

Female Reproductive System

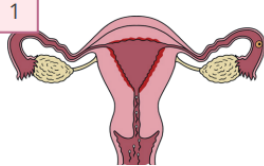
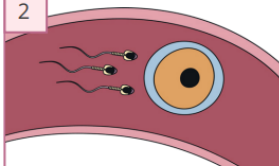
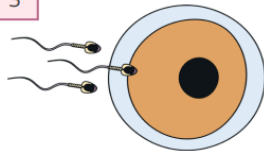
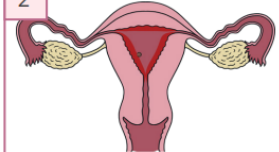


Male Reproductive System



Reproduction

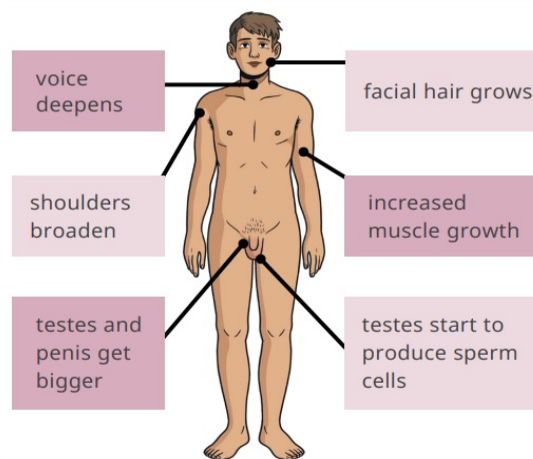
Fertilisation

1		2	
During sexual intercourse, semen containing sperm cells is ejaculated from the penis into the vagina.		Sperm cells travel through the female reproductive system to meet an egg cell in the oviduct.	
3		2	
One sperm cell penetrates the egg cell membrane. The nucleus of the sperm cell fuses with the nucleus of the egg cell. This is called fertilisation.		The resultant zygote divides several times to form a ball of cells called an embryo, which implants in the uterus lining.	

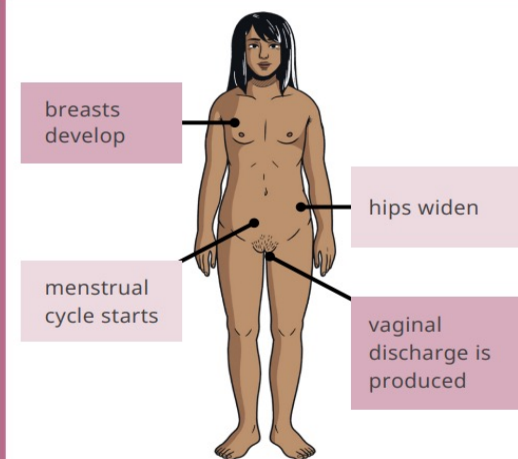
The **placenta** is attached to the foetus by the **umbilical cord**. **Smoking** cigarettes and drinking **alcohol** during pregnancy can increase the risk of miscarriage, stillbirth or sudden infant death syndrome (SIDS), premature birth, and/or have a low birthweight. They can also cause the baby to have problems with brain development which can result in learning difficulties and behavioural problems.

Puberty is a period of time in a person's life when they become sexually mature. Puberty causes physical and emotional changes that affect males and females differently. These changes happen because of **hormones**. Changes that affect both males and females: • growth of pubic hair • growth of underarm hair • growth spurts • acne or occasional pimples • body odour becomes stronger • mood changes • sexual thoughts and feelings.

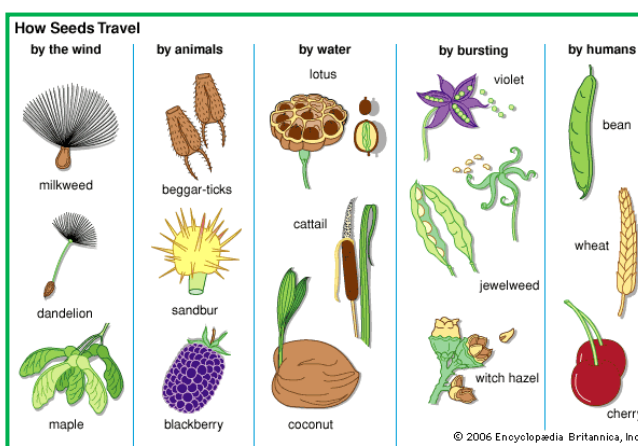
Puberty Changes in Males



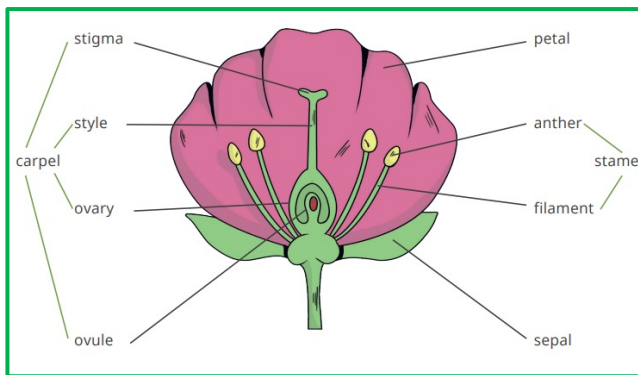
Puberty Changes in Females



Key word	Definition
Anther	Produces male sex cells (pollen).
Carpel	The female reproductive part of the flower, consisting of the ovary, ovule, style and stigma.
Filament	A stalk-like structure that supports the anther.
Ovary	Produces female sex cells (eggs).
Ovule	Develops into a seed after fertilisation.
Stamen	The male part of a flower consisting of an anther held up on a filament.
Stigma	The top of the female part of the flower, which is sticky, so pollen grains stick to it.
Style	The tube connecting the stigma to the ovary which pollen travels down.
Oviduct	Carries egg cells from the ovaries to the uterus.
Uterus	Where the baby develops during pregnancy.
Cervix	A ring of muscle at the lower end of the uterus. This keeps the baby in place during pregnancy.
Vagina	A muscular tube that leads from the cervix to the outside of the body.
Testis	Produces sperm cells and releases the male sex hormone testosterone.
Gland	Produces fluids that mix with sperm cells to make semen.
Urethra	Allows urine and semen to pass out of the male's body.



Pollination is where the pollen from one flower is transferred to the stigma of another. This can be done by wind or animals. The pollen then moves down the style to the ovary and the nucleus of the pollen fuses with the nucleus of the egg. This is **Fertilisation**. The flower then turns into a fruit. When the fruit dies, the seeds inside it are released into the environment and a new plant will grow (**germinate**). The plant is adapted to **disperse** its seeds as far as possible from the parent plant so that the new plant is not competing for water and light with its parent.



Insect Pollinated Plants	Wind Pollinated Plants
They have bright petals with a sweet smell to attract insects.	No petals or small green/brown petals, as no need to attract insects.
The stigma and anther are inside the flower.	The anther hangs loosely out of the plant to make it easier for wind to blow it from the plant.
The stigma is sticky, so that pollen carried from the insects sticks to it.	The stigma hangs outside of the plant to make it easier to catch pollen on the wind.
Pollen grains are larger and can easily stick to insects, so fewer pollen grains need to be produced.	The stigma may be feathery or sticky to catch pollen blown by the wind.
The anthers are firm and rigid to allow the insects to brush against them.	They produce large amounts of pollen to increase the chances of it reaching another plant.
They often contain nectar, which is sweet and sugary to attract insects. Some bees use nectar to make honey.	Their pollen has a low mass so can be blown far on the wind.