Summary – Cells and Reproduction

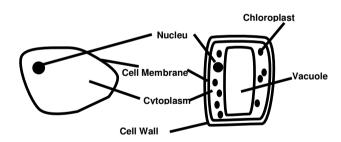
Microscopes

We can view small things using a **microscope**. The microscope has two **lenses** of different **magnifications**. The **overall magnification** is the two magnifications multiplied together. We often use a **dye** to help us see cells better.



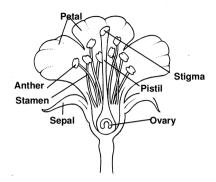
Cells

Cells are the **building blocks** of all life. They can have different jobs such as muscles, neurons (brain cells) or sex cells for reproduction. Plant and animal cells are different.



Name	What is it for
Cell wall	Holds the cell together
Cell membrane	Controls what enters and leaves the cell.
Vacuole	Contains cell sap
Cytoplasm	Where chemical reactions occur.
Chloroplasts	Contains chlorophyll (green)
Nucleus	Stores DNA. Controls the cell

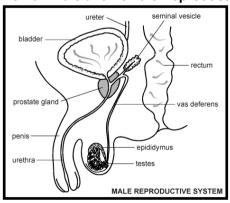
Parts of a flower

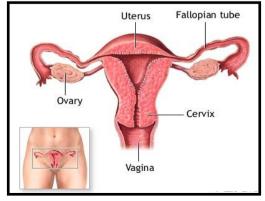


Name	What is it for
Anther	Produces pollen (male sex cell)
Petal	Attracts insects and other pollinators
Stamen	Provides support for the anther
Stigma	Traps pollen
Sepal	Protects the flower as a bud
Pistil/Style	Tube for pollen to travel through
Ovary	Produces eggs (female sex cell)

Pollen is **carried by wind or by insects** from the anther of one flower to the stigma of another. The pollen then forms a tube going down the pistil/style to reach an egg in the ovary. Once the egg has been **fertilised** (when the sex cells meet and combine), the ovary often becomes a fruit which we can eat!

Human Male and Female Reproductive System





Name	What is it for
Vas deferens	Transports sperm
Fallopian tube	Transports eggs. Place where sperm and egg meet
Cervix	Opening between vagina and uterus
Vagina	Receives sperm
Testicles	Produces sperm
Ovaries	Produces eggs
Penis	Inserts into female
Prostate gland	Produces fluid for the sperm to swim
Uterus/womb	Place where baby develops

Puberty

The period of time in which humans become **sexually mature** is called **puberty**.

Pregnancy

Human pregnancy last an average of **40 weeks**. For the first few days after fertilisation, the baby is only a few cells called a **zygote**. Between 5 days and 5 weeks it is an **embryo** and between 5 and 40 weeks it is a **foetus**. Ideally, a baby should be born head first facing the spine of the mother.

Contraception

We can still **have sex** but **reduce the chances of pregnancy** by using **contraception**. Only "barrier" methods such as **condoms** can also reduce the chances of catching a sexually transmitted disease.

Method of contraception	How it works
Condoms	Thin "glove" of rubber that fits over the penis or inside the
	vagina.
Pill	A tablet taken daily that contains hormones.
IUD (Inter-uterine-device)	Tiny plastic or copper device inserted inside the womb.
Injection or Implant	An injection or capsule placed under the skin that contains
	hormones.
Cap	A rubber "dish" that fits over the cervix.
Natural or "Rhythm"	Diary of when a woman is most likely NOT to get pregnant.