

Reproduction revision notes

Reproduction is how living organisms produce new individuals of their own kind. This topic covers asexual and sexual reproduction, sexual reproduction in flowering plants and in humans, the sex hormones, and sexually transmitted infections. It also covers how flowers are pollinated, how seeds germinate, and how the fetus develops in the uterus.

For Cambridge IGCSE Biology 0610 (and 0970, which has the same content). **Supplement** is Extended content, only examined on Papers 2 and 4.

1 Asexual and sexual reproduction Spec 16.1, 16.2

Asexual reproduction Spec 16.1.1, 16.1.2, 16.1.3

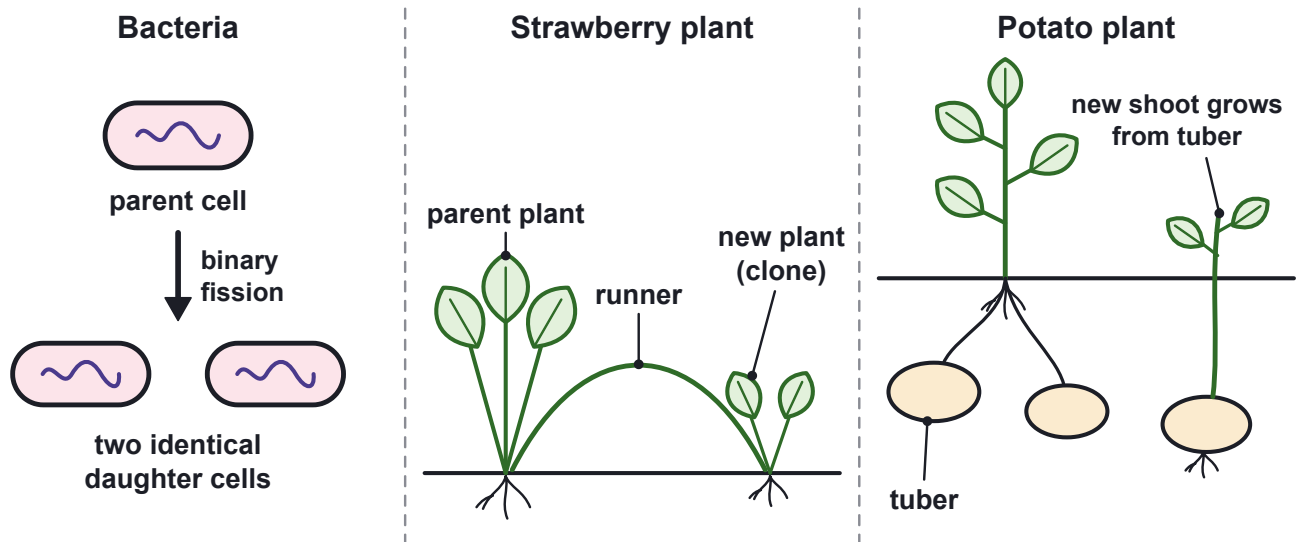
Asexual reproduction is a process resulting in the production of **genetically identical offspring** from **one parent**. There are no gametes and no fusion of nuclei, so there is no mixing of genetic information. The offspring are clones of the parent.

Asexual reproduction	A process resulting in the production of genetically identical offspring from one parent.
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Spotting examples of asexual reproduction

You must be able to identify asexual reproduction in diagrams, images and information you are given. Look for one parent only, and offspring that are copies of it.

Examples of asexual reproduction	
Organism	What happens
Bacteria	A bacterial cell divides in two (binary fission). Each new cell is genetically identical to the parent cell.
Strawberry plant	The parent plant grows horizontal stems called runners. A new plant grows from a bud on the runner and becomes separate from the parent.
Potato plant	Underground stems swell to form tubers. Each tuber can grow into a new plant that is genetically identical to the parent.
Daffodil	New bulbs grow from buds on the parent bulb. Each one separates and grows into a new plant that is genetically identical to the parent.
Fungi (such as bread mould)	The parent releases spores. Each spore can grow into a new fungus.



Three examples of **asexual reproduction**. Each has **one parent**, and the offspring are genetically identical to it.

Exam tip: In a 'spot the example' question, give the reason: **only one parent is involved and the offspring are genetically identical to it.**

Supplement

Advantages and disadvantages of asexual reproduction

Supplement

Asexual reproduction in the wild and in crop production

	Advantages	Disadvantages
To a population of a species in the wild	Only one parent is needed, so no mate has to be found. It is quick and uses less energy. Many offspring can be produced in a short time. A population can spread quickly into a favourable environment where it is well adapted.	There is no genetic variation, so all the individuals are equally affected by a change in the environment or by a new disease. The population may not survive. There is no new variation for natural selection to act on.
To crop production	All the plants have the same desirable features, so the crop is uniform in size, yield and quality. A plant with useful features can be copied exactly. Many plants can be produced quickly and cheaply.	All the plants are equally susceptible to the same disease or pest, so the whole crop can be lost. There is no variation, so no new varieties are produced.

Common mistake: Do not write that asexual offspring are 'similar' to the parent. The mark is for 'genetically identical'.

Sexual reproduction Spec 16.2.1, 16.2.2, 16.2.3, 16.2.4

Sexual reproduction is a process involving the **fusion of the nuclei of two gametes** to form a zygote and the production of offspring that are **genetically different from each other**. Gametes are the sex cells: sperm and egg cells in animals, and pollen nuclei and egg cells in flowering plants.

Fertilisation is the fusion of the nuclei of gametes. The gametes usually come from two parents, so the offspring inherit a mixture of genetic information from both of them.

Sexual reproduction

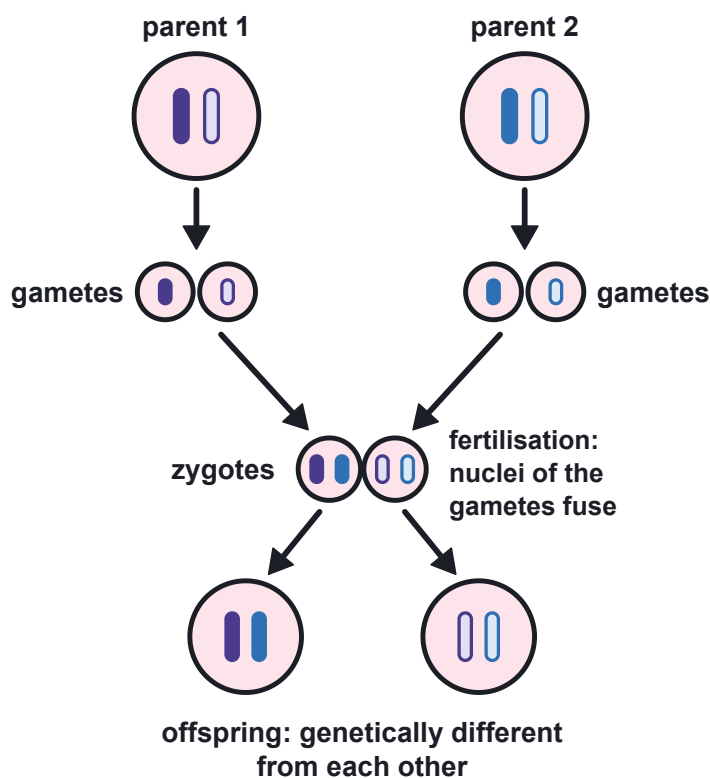
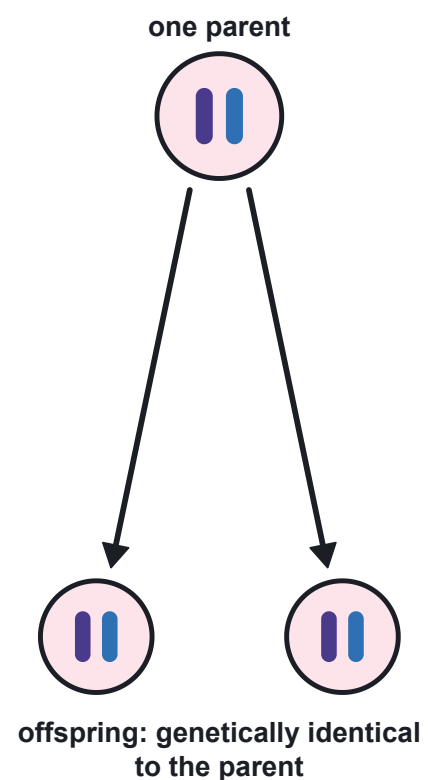
A process involving the fusion of the nuclei of two gametes to form a zygote and the production of offspring that are genetically different from each other.

Fertilisation

The fusion of the nuclei of gametes.

Sexual and asexual reproduction compared

	Sexual reproduction	Asexual reproduction
Number of parents	Usually two	One
Gametes and fusion of nuclei	Yes	No
Offspring	Genetically different from each other	Genetically identical to the parent

Sexual reproduction**Asexual reproduction**

In sexual reproduction the **nuclei of two gametes fuse**, so the offspring are genetically different from each other. Asexual offspring are genetically identical to the one parent.

Supplement**Haploid and diploid nuclei****Supplement**

The nuclei of gametes are **haploid**: they contain a single set of chromosomes. The nucleus of a zygote is **diploid**: it contains two sets of chromosomes, one set from each parent. Fertilisation therefore restores the full (diploid) number of chromosomes.

Supplement

Advantages and disadvantages of sexual reproduction

Supplement

Sexual reproduction in the wild and in crop production

	Advantages	Disadvantages
To a population of a species in the wild	The offspring show genetic variation. If the environment changes, or a new disease appears, some individuals may survive and reproduce. This gives the population a better chance of adapting through natural selection.	Two parents are needed, so a mate must be found. It takes more time and energy. Fewer offspring are usually produced than by asexual reproduction, and the population increases more slowly.
To crop production	Variation can produce new varieties of crop, for example plants with higher yield or disease resistance. Some plants in the crop may survive a disease or pest that kills others.	The crop plants are not uniform, so size, yield and quality vary. Plants with the best features cannot be copied exactly. It is usually slower than asexual reproduction.

Exam tip: Cambridge definitions are marked word for word. Learn 'fusion of the nuclei of gametes' for fertilisation, and 'genetically different from each other' for the offspring of sexual reproduction.

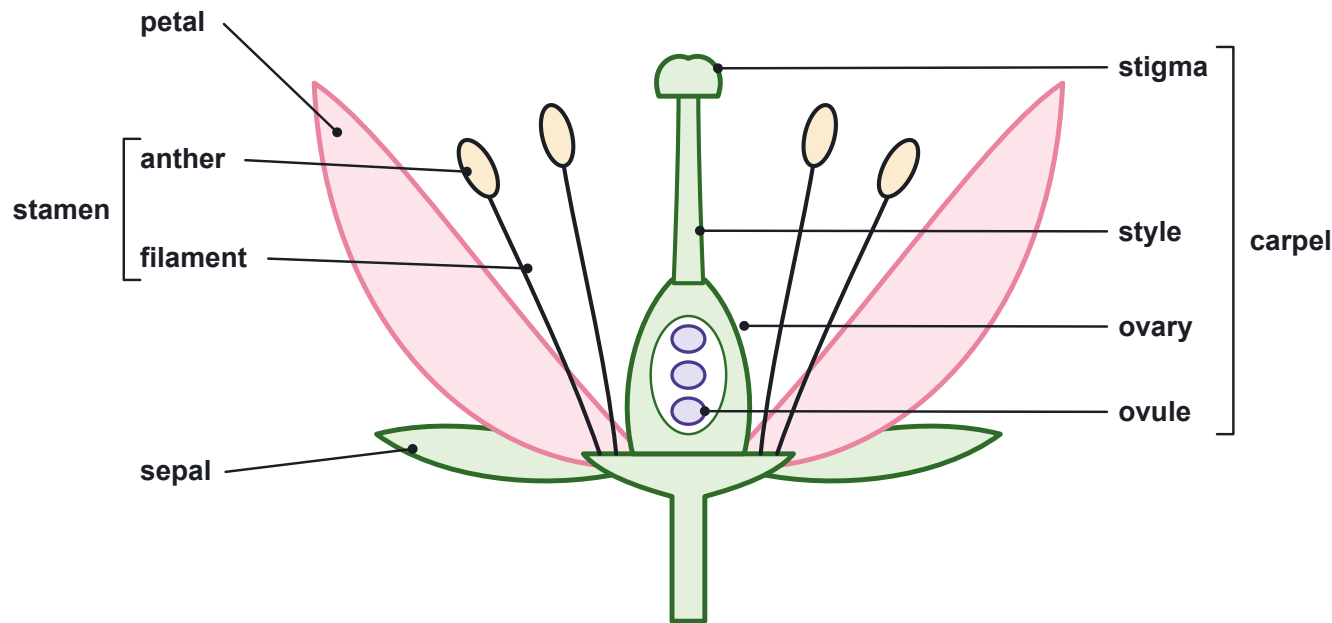
Quick check

1. Define asexual reproduction.
2. Name two examples of asexual reproduction in plants.
3. Define fertilisation.
4. Are the offspring of sexual reproduction identical to each other?
5. **Supplement** State whether the nucleus of a zygote is haploid or diploid.

2 Sexual reproduction in plants Spec 16.3

Structure of an insect-pollinated flower Spec 16.3.1, 16.3.2

You must be able to identify, and draw, the parts of an insect-pollinated flower, and state what each part does. The **stamen** is the male part and the **carpel** is the female part.



Half-flower of an insect-pollinated flower. The **stamen** (anther and filament) is the male part; the **carpel** (stigma, style, ovary and ovules) is the female part.

Parts of an insect-pollinated flower and their functions	
Part	Function
Sepal	Protects the flower in the bud
Petal	Brightly coloured, to attract insects
Stamen	Male part of the flower; made of an anther and a filament
Anther	Produces pollen grains, which contain the male gametes
Filament	Holds the anther up
Carpel	Female part of the flower; made of the stigma, style, ovary and ovules
Stigma	Receives pollen grains; often sticky so that pollen grains stay on it
Style	Holds up the stigma
Ovary	Contains the ovules
Ovule	Contains the female gamete (egg cell); after fertilisation it develops into a seed

Common mistake: The anther makes the pollen. The stigma only receives it. Do not mix up the stamen (male) and the carpel (female).

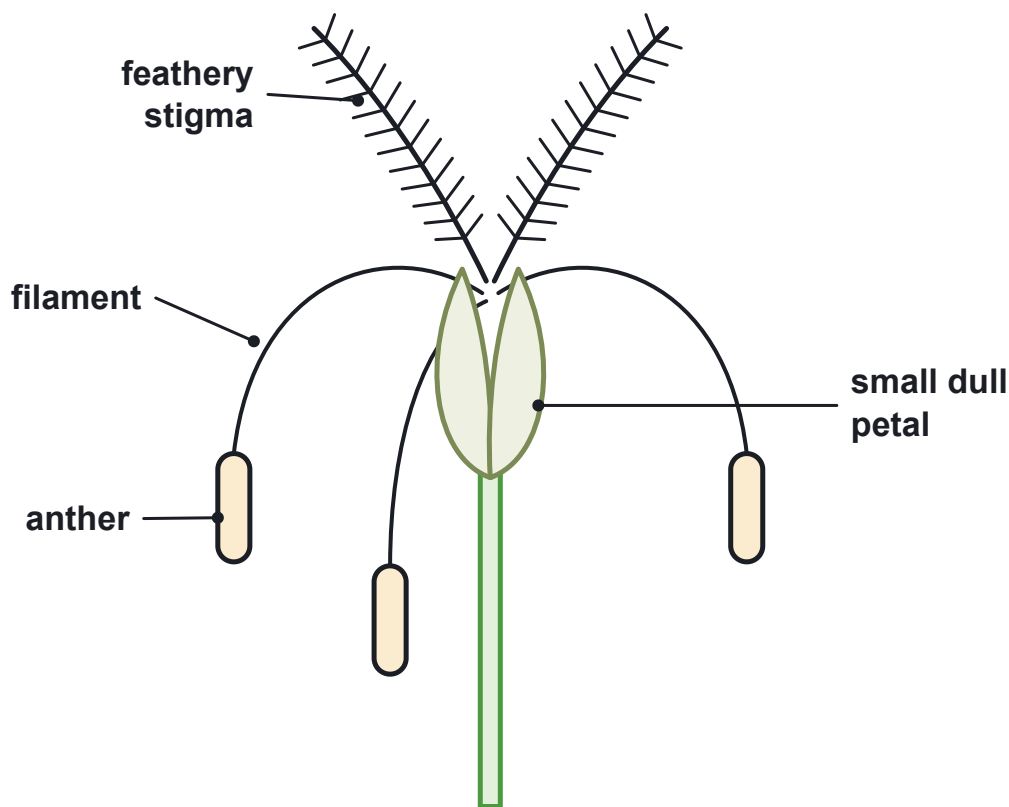
Practical skill: When you draw a flower, use a sharp pencil and a single clear line. Draw it large, do not shade, and label with straight lines that do not cross. Label every part in the list above.

Insect- and wind-pollinated flowers Spec 16.3.3, 16.3.4, 16.3.7

Flowers are adapted to be pollinated either by insects or by wind. Their structures differ in ways you can see and describe.

Wind-pollinated flowers

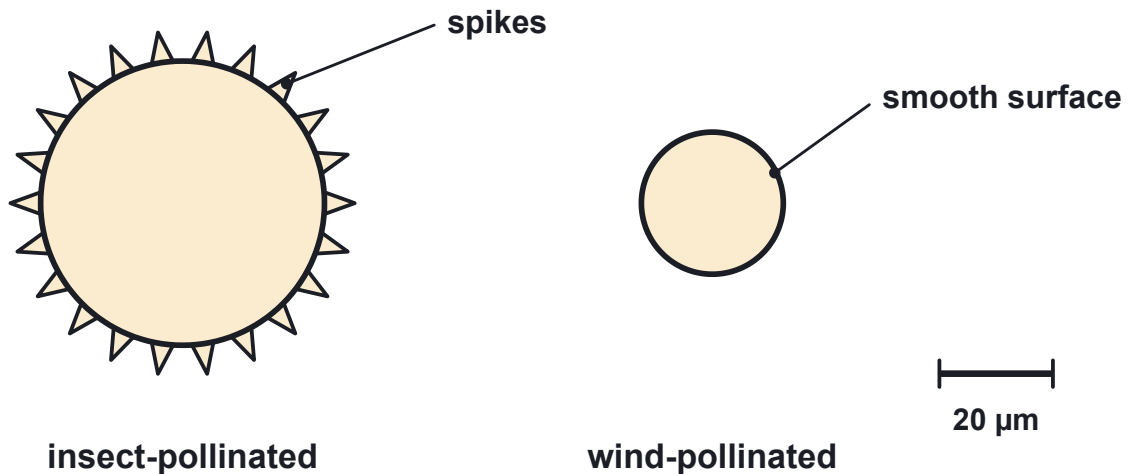
In a wind-pollinated flower, such as a grass, the **anthers** hang outside the flower on long filaments, where the wind can blow the pollen away. The **stigmas** are large and feathery and also hang outside the flower, to catch pollen grains carried in the air.



A wind-pollinated grass flower: **anthers hang outside** on long filaments and the **feathery stigmas** catch pollen from the air.

Pollen grains

Pollen grains of insect-pollinated and wind-pollinated flowers		
	Insect-pollinated	Wind-pollinated
Size and mass	Larger and heavier	Small and light, so they are carried easily by the wind
Surface	Sticky or with spikes or hooks, so they stick to insects	Smooth and not sticky, so they separate easily and are blown away by the wind
Number made	Fewer	Very large numbers, because most pollen does not reach another flower



Insect-pollinated pollen is larger with a spiky surface; wind-pollinated pollen is small, smooth and light.

Adaptations of the flowers

Structural adaptations of insect-pollinated and wind-pollinated flowers		
Feature	Insect-pollinated flower	Wind-pollinated flower
Petals	Large, brightly coloured, often scented, to attract insects	Small, dull, green or absent; there is no need to attract insects
Nectar	Produced, as food for insects	Not produced
Anthers	Inside the flower, positioned so that insects brush against them	Hanging outside the flower, so the wind blows the pollen away
Stigma	Inside the flower, small and sticky, positioned so insects brush against it	Large and feathery, hanging outside the flower, to catch pollen from the air

Exam tip: Always link a feature to its job. 'Feathery stigma' scores less than 'feathery stigma gives a large surface area to catch pollen from the wind'.

Pollination and fertilisation Spec 16.3.5, 16.3.6, 16.3.12

Pollination is the transfer of pollen grains from an anther to a stigma. Pollination is not the same as fertilisation. Pollen has to reach the stigma first, then fertilisation can happen.

Fertilisation occurs when a pollen nucleus fuses with a nucleus in an ovule.

Pollination	The transfer of pollen grains from an anther to a stigma.
Fertilisation (in plants)	The fusion of a pollen nucleus with a nucleus in an ovule.

Supplement

The pollen tube

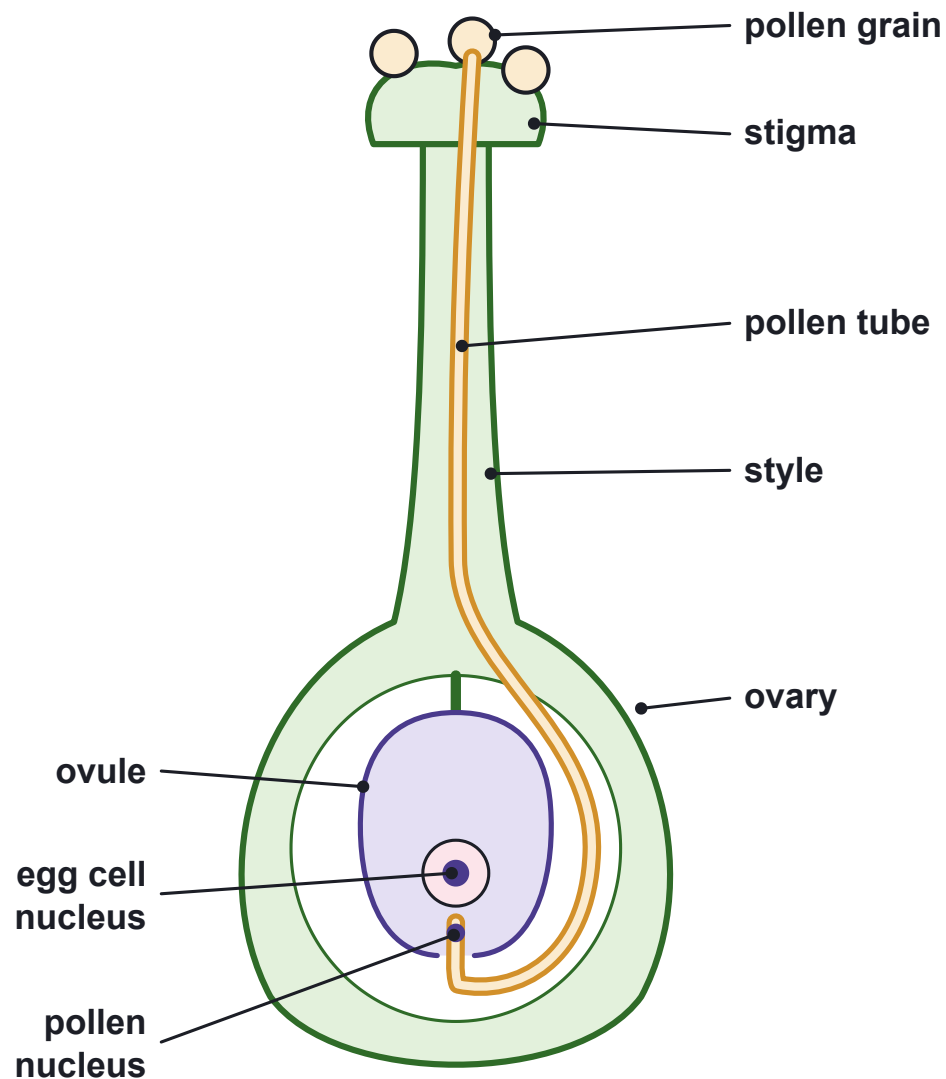
Supplement

1. A pollen grain lands on the stigma of a flower of the same species.
2. A pollen tube grows out of the pollen grain and down through the style.
3. The pollen tube grows towards the ovary and enters an ovule.
4. The nucleus of the pollen grain (the male gamete) passes down the tube into the ovule.
5. The pollen nucleus fuses with the nucleus of the egg cell in the ovule. This is fertilisation, and it forms a zygote.

Supplement

You do not need to know how the endosperm is made or how the seed and fruit develop.

Supplement



The **pollen tube** grows down the style and into an ovule. The **pollen nucleus fuses with the egg cell nucleus**: this is fertilisation.

Common mistake: Pollination and fertilisation are different. Pollination is the transfer of pollen to the stigma. Fertilisation is the fusion of nuclei.

Self-pollination and cross-pollination Spec 16.3.9, 16.3.10, 16.3.11 Supplement

Self-pollination	The transfer of pollen grains from the anther of a flower to the stigma of the same flower or a different flower on the same plant.
Cross-pollination	The transfer of pollen grains from the anther of a flower to the stigma of a flower on a different plant of the same species.

In **self-pollination** only one plant is involved. In **cross-pollination** two plants of the same species are involved, so the offspring have genetic information from two different parents and show more **variation**.

Effects on a population

Self-pollination and cross-pollination compared		
	Self-pollination	Cross-pollination
Variation	Less variation in the offspring, because the genetic information comes from one parent plant	More variation in the offspring, because genetic information is mixed from two different plants
Capacity to respond to changes in the environment	Less able to respond. The offspring are similar, so a change such as a new disease may affect all of them. Fewer individuals may survive.	Better able to respond. Some varied offspring may be suited to the new conditions, survive and reproduce, so the population is more likely to survive.
Reliance on pollinators	Less reliant on pollinators: pollen only has to reach a stigma on the same plant (often in the same flower), so seeds can still be made if pollinators are scarce	Relies on pollinators such as insects, or on the wind, to carry pollen to a different plant. If pollinators are scarce, fewer seeds may be made.

Exam tip: 'Discuss' questions need a benefit and a drawback each time. Link each to variation, to ability to cope with a changing environment, or to reliance on pollinators.

Germination Spec 16.3.8

Germination is when a seed begins to grow into a new plant. A seed needs three conditions to germinate: **water**, **oxygen** and a **suitable temperature**. Light is not needed for most seeds to germinate.

Why seeds need these conditions	
Condition	Why it is needed
Water	The seed absorbs water and swells, and its enzymes become active. The enzymes break down the stored food so it can be used for growth.
Oxygen	Needed for aerobic respiration, which releases energy for growth
Suitable temperature	Enzymes work best at a suitable temperature. Too cold and reactions are too slow; too hot and enzymes are denatured.

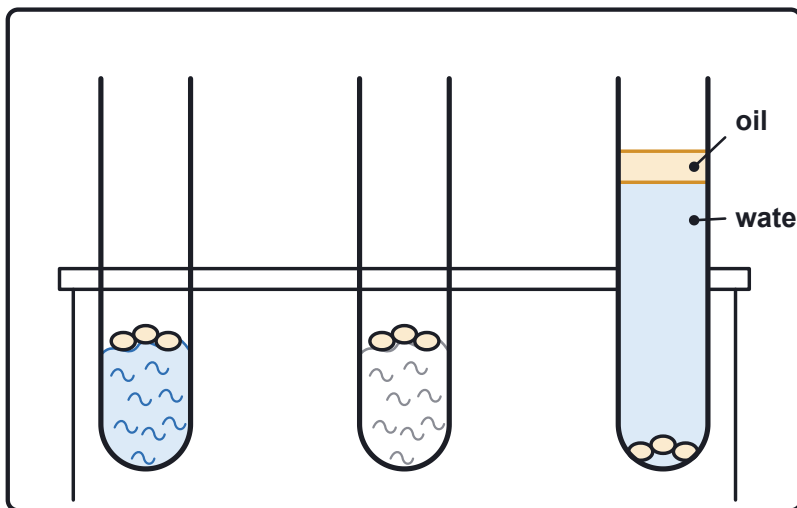
Investigating the conditions needed for germination

Set up several tubes with the same number of seeds and change one condition at a time. Tube A has all three conditions and is the **control**. Keep all the tubes in the dark (a fridge is dark inside), so that light is the same for every tube and is not a confounding variable.

Germination investigation

Tube	Water	Oxygen	Temperature and light	Expected result
A (control)	Damp cotton wool	Air present	20 °C, dark cupboard	Seeds germinate
B	Dry cotton wool	Air present	20 °C, dark cupboard	No germination: no water
C	Seeds covered with boiled, cooled water and a layer of oil	Little or none: boiling removes dissolved oxygen, and the oil stops air entering	20 °C, dark cupboard	No germination: no oxygen
D	Damp cotton wool	Air present	Fridge, about 4 °C (dark)	No germination: too cold

dark cupboard at 20 °C

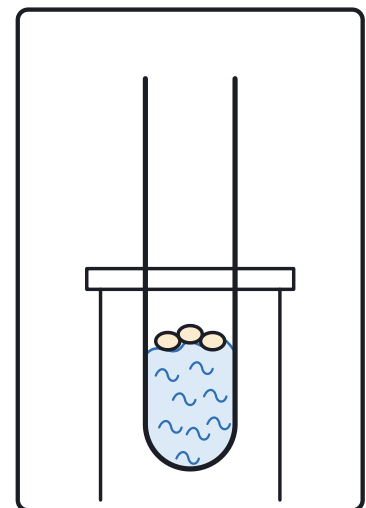


A (control)
damp cotton wool
seeds germinate

B
dry cotton wool
no water

C
boiled, cooled water
with oil on top
no oxygen

fridge at about 4 °C (dark)



D
damp cotton wool
too cold

Each tube differs from the **control** (A) in one condition only. Only tube A has water, oxygen and a suitable temperature.

Practical skill: Keep every other variable the same: same type and number of seeds, same volume of water, same light (all in the dark) and same time. Leave the tubes for several days and count the seeds that have germinated in each. Using more seeds per tube makes the result more reliable.

Exam tip: Say what each tube shows by comparing it with the control. Only one condition should differ between the control and each other tube.

Quick check

1. Which part of a flower makes pollen?
2. Define pollination.
3. Give two features of wind-pollinated pollen grains.
4. What three conditions does a seed need to germinate?
5. **Supplement** Define cross-pollination.

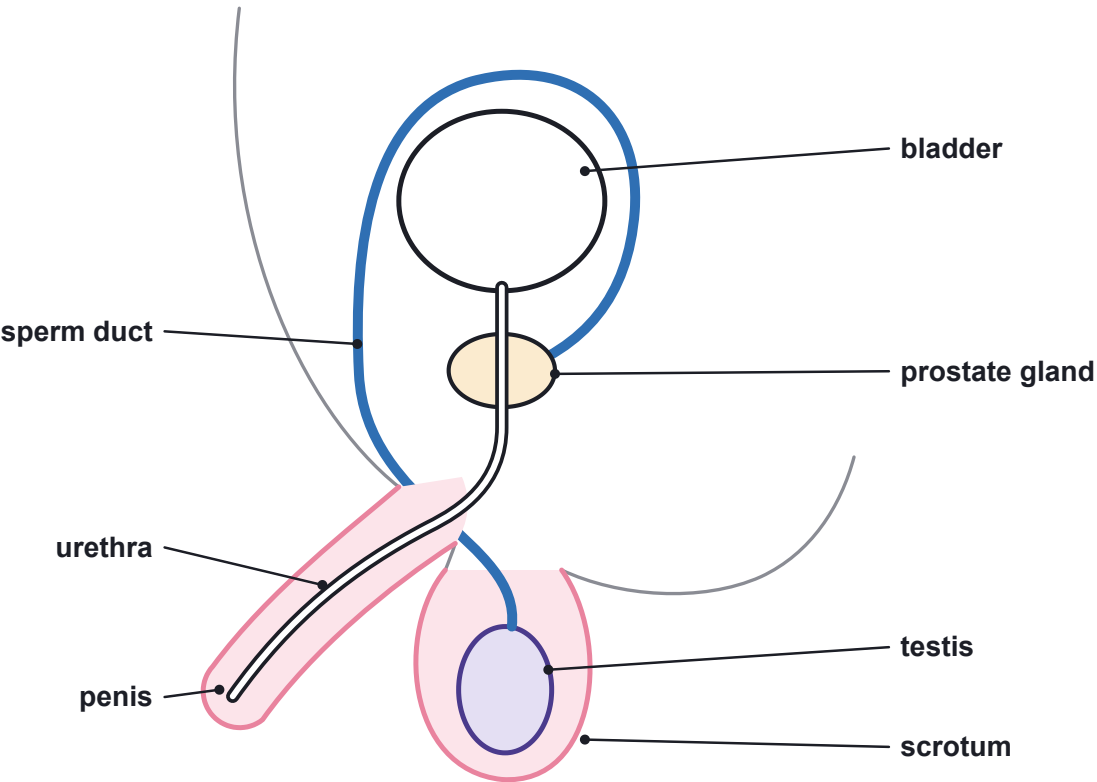
3 Sexual reproduction in humans Spec 16.4

The male and female reproductive systems Spec 16.4.1, 16.4.2

Humans reproduce sexually. The male system makes and delivers **sperm**. The female system makes **egg cells**, receives the sperm and carries the developing baby.

The male reproductive system

Parts of the male reproductive system	
Part	Function
Testes	Make sperm (and the hormone testosterone)
Scrotum	Bag of skin that holds the testes outside the body, where it is cooler than body temperature
Sperm ducts	Tubes that carry sperm from the testes to the urethra
Prostate gland	Adds fluid to the sperm to make semen, which helps the sperm to swim and gives them nutrients
Urethra	Tube inside the penis that carries semen (and urine) out of the body
Penis	Places sperm inside the vagina during sexual intercourse

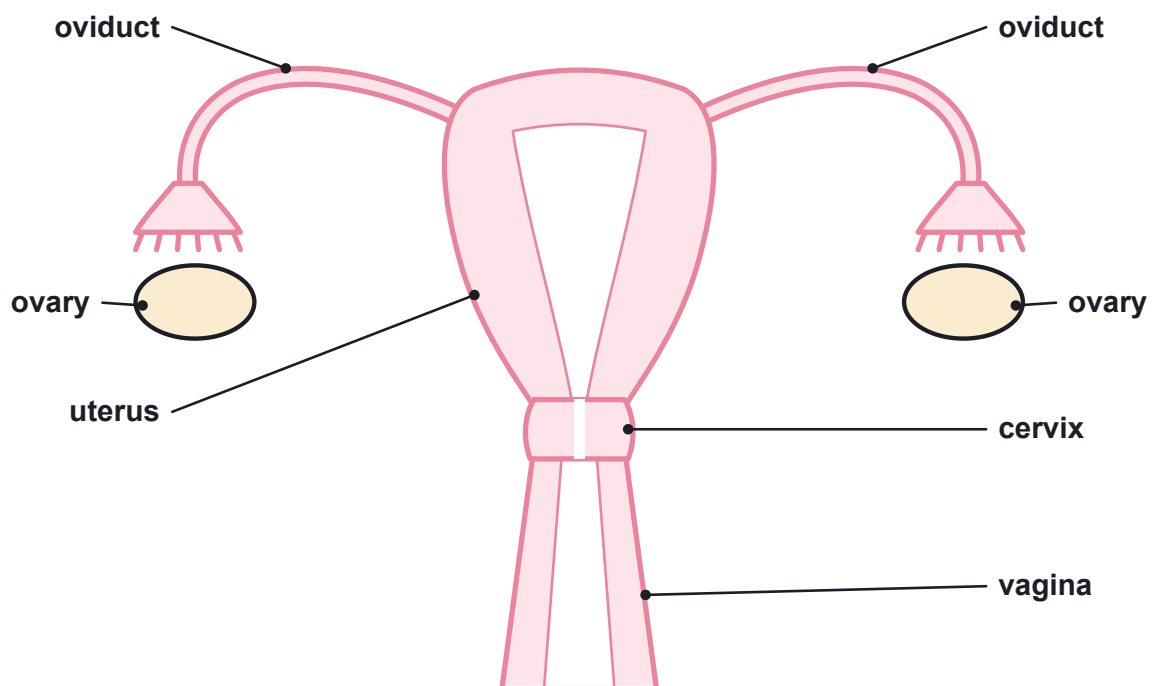


The male reproductive system. Sperm travel from the **testis** along the **sperm duct** (blue) to the urethra.

The female reproductive system

Parts of the female reproductive system

Part	Function
Ovaries	Make and release egg cells (and the hormones oestrogen and progesterone)
Oviducts	Tubes that carry the egg cell to the uterus. Fertilisation usually happens here
Uterus	Muscular organ with a soft lining, where the embryo implants and the fetus develops
Cervix	Ring of muscle at the opening of the uterus that keeps the fetus in during pregnancy
Vagina	Receives the penis and the sperm during sexual intercourse. The baby passes through it at birth



The female reproductive system. The funnel-shaped end of each **oviduct** lies close to an ovary.

Exam tip: Do not mix up the oviduct (carries the egg) and the sperm duct (carries sperm). Do not mix up the urethra and the ureter either. The ureter is part of the urinary system.

Gametes and fertilisation Spec 16.4.3, 16.4.4, 16.4.5, 16.4.6

In humans, **fertilisation** is the fusion of the nuclei from a male gamete (sperm) and a female gamete (egg cell). The fertilised egg is called a **zygote**.

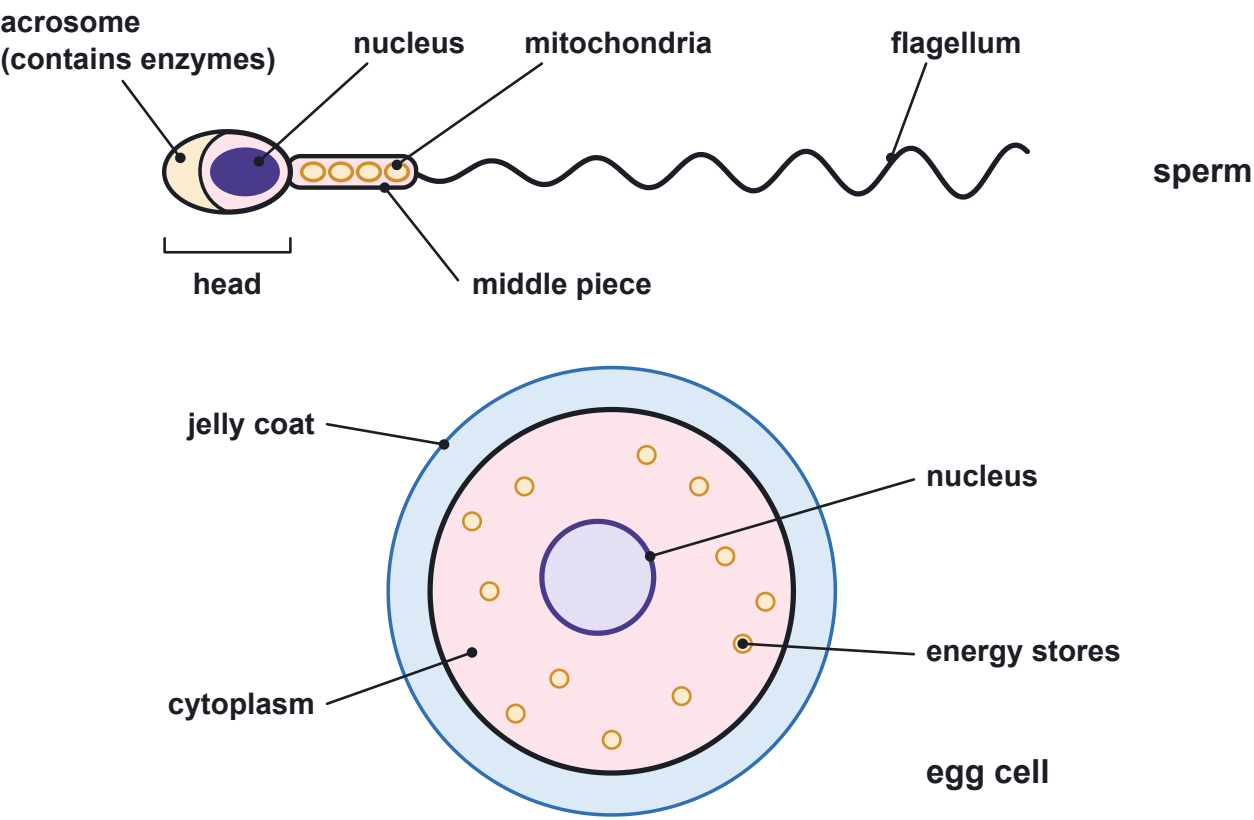
Adaptive features of sperm

How a sperm is adapted to its function

Feature	How it helps
Flagellum (tail)	Whips from side to side to move the sperm towards the egg cell
Many mitochondria	Release energy by aerobic respiration for the flagellum to move
Enzymes in the acrosome	Digest a way through the jelly coat around the egg cell so the sperm nucleus can enter

Adaptive features of egg cells

How an egg cell is adapted to its function	
Feature	How it helps
Energy stores (in the cytoplasm)	Supply energy for the zygote and early embryo until it implants in the uterus
Jelly coat that changes at fertilisation	After one sperm has entered, the jelly coat changes so that no other sperm can get in. This makes sure only one sperm nucleus fuses with the egg nucleus



The sperm and the egg cell are not drawn to the same scale.

A sperm and an egg cell (not to the same scale). Note the **acrosome**, **mitochondria** and **flagellum** of the sperm, and the **energy stores** and **jelly coat** of the egg cell.

Comparing male and female gametes

Sperm compared with egg cells		
Feature	Sperm	Egg cell
Size	Very small	Much larger (one of the largest human cells)
Structure	Head with nucleus and acrosome, middle piece with mitochondria, flagellum	Nucleus, cytoplasm with energy stores, jelly coat
Motility	Can swim using the flagellum	Cannot move by itself; it is moved along the oviduct
Numbers	Millions made	Usually one released each month

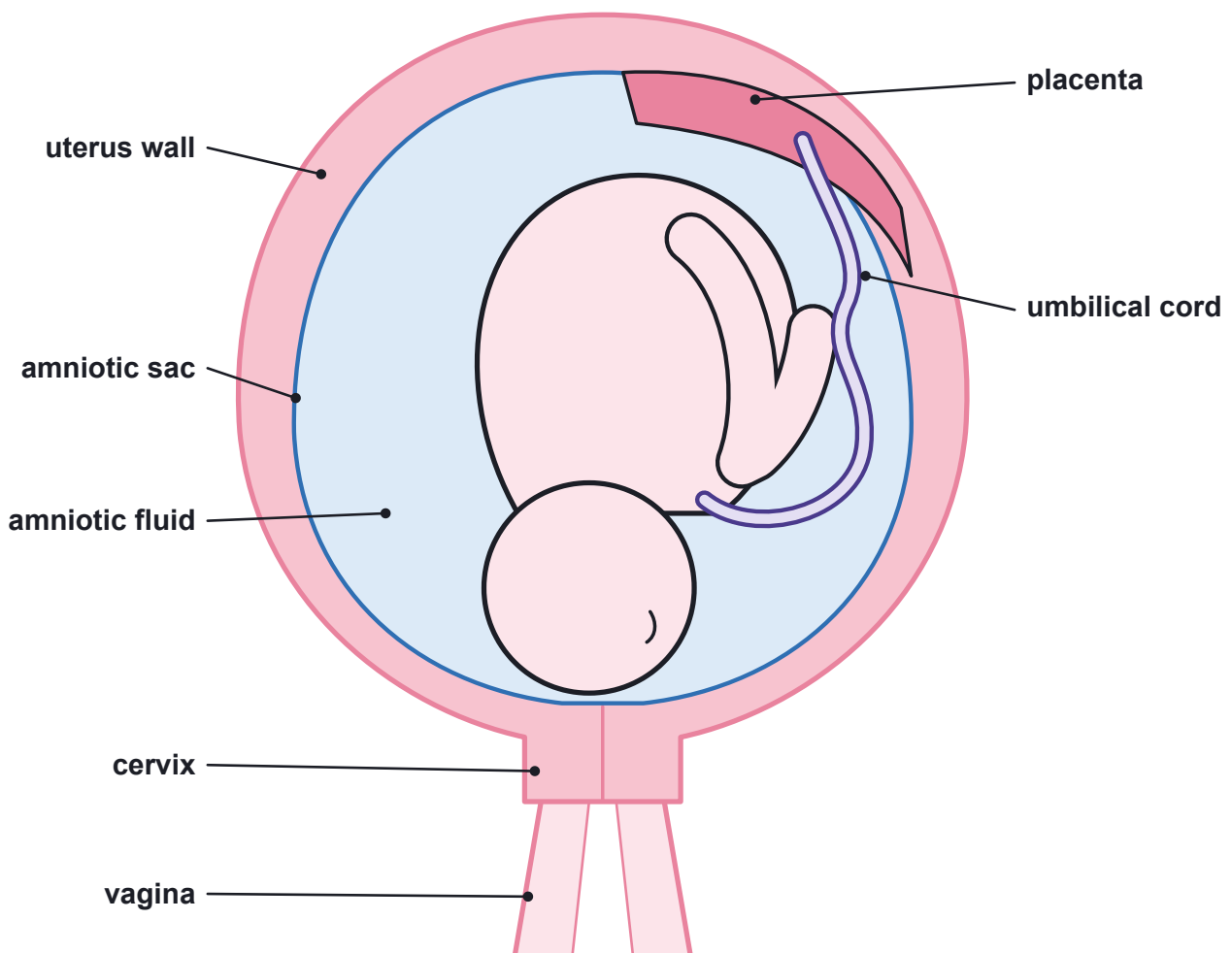
Exam tip: For 'explain the adaptive features' questions, name the feature and then say how it helps: 'mitochondria, to release energy for swimming'.

Implantation, the fetus and the placenta Spec 16.4.7, 16.4.8, 16.4.9, 16.4.10

After fertilisation, the zygote divides to form an **embryo**. The embryo is a ball of cells. It travels along the oviduct to the uterus and **implants** into the lining of the uterus. It then develops into a fetus.

Structures that protect and support the developing fetus

Structure	Function
Placenta	Disc of tissue attached to the uterus wall where substances are exchanged between the mother's blood and the fetus's blood
Umbilical cord	Connects the fetus to the placenta. It contains blood vessels that carry blood between the fetus and the placenta
Amniotic sac	Membrane that surrounds the fetus and holds the amniotic fluid
Amniotic fluid	Protects the fetus from knocks and bumps (it acts as a shock absorber)



The fetus in the uterus. The **amniotic fluid** inside the amniotic sac protects the fetus; the **umbilical cord** joins it to the placenta.

Supplement

Exchange at the placenta

Supplement

The blood of the mother and the blood of the fetus flow close together in the **placenta**, but they do not mix. Substances pass between them across a thin barrier, mainly by diffusion. The umbilical cord carries the fetus's blood to and from the placenta.

Supplement

Exchange between the mother's blood and the fetus's blood

From mother to fetus

Dissolved nutrients (for example glucose and amino acids)

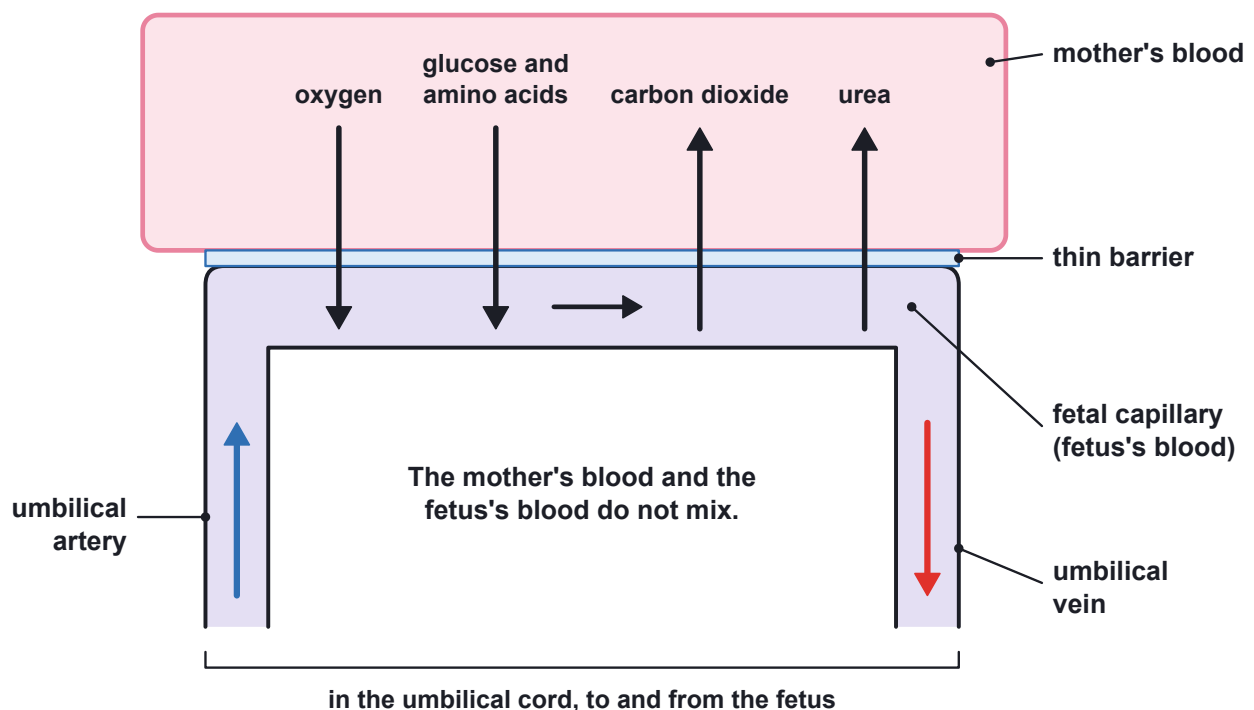
Oxygen

From fetus to mother

Excretory products (for example urea)

Carbon dioxide

Supplement



Exchange at the placenta. Substances cross a **thin barrier**; the mother's blood and the fetus's blood **do not mix**.

Supplement

Some **pathogens** (for example some viruses) and **toxins** (for example some drugs and alcohol) can pass across the placenta from the mother's blood into the fetus's blood and may harm the fetus.

Supplement

Common mistake: The mother's blood does not flow into the fetus. The two bloods stay separate, and substances cross the placenta between them.

Quick check

1. Which part of the male reproductive system carries sperm from the testes to the urethra?
2. Name the part of the female system where the fetus develops.
3. What happens at fertilisation?
4. State the function of amniotic fluid.
5. **Supplement** Name two types of substance that can cross the placenta and harm a fetus.

4 Sex hormones in humans Spec 16.5

Testosterone, oestrogen and puberty Spec 16.5.1

At **puberty**, the body changes and becomes able to reproduce. These changes are controlled by sex hormones. **Testosterone** is made in the testes. **Oestrogen** is made in the ovaries.

The hormones cause the development of **secondary sexual characteristics**. They also regulate them once they have developed.

Secondary sexual characteristics at puberty

Hormone	Secondary sexual characteristics
Testosterone (boys)	Growth of facial hair, pubic hair and underarm hair; voice deepens; muscles develop; testes and penis grow; sperm production begins
Oestrogen (girls)	Breasts develop; pubic hair and underarm hair grow; hips widen; the menstrual cycle begins and eggs are released from the ovaries

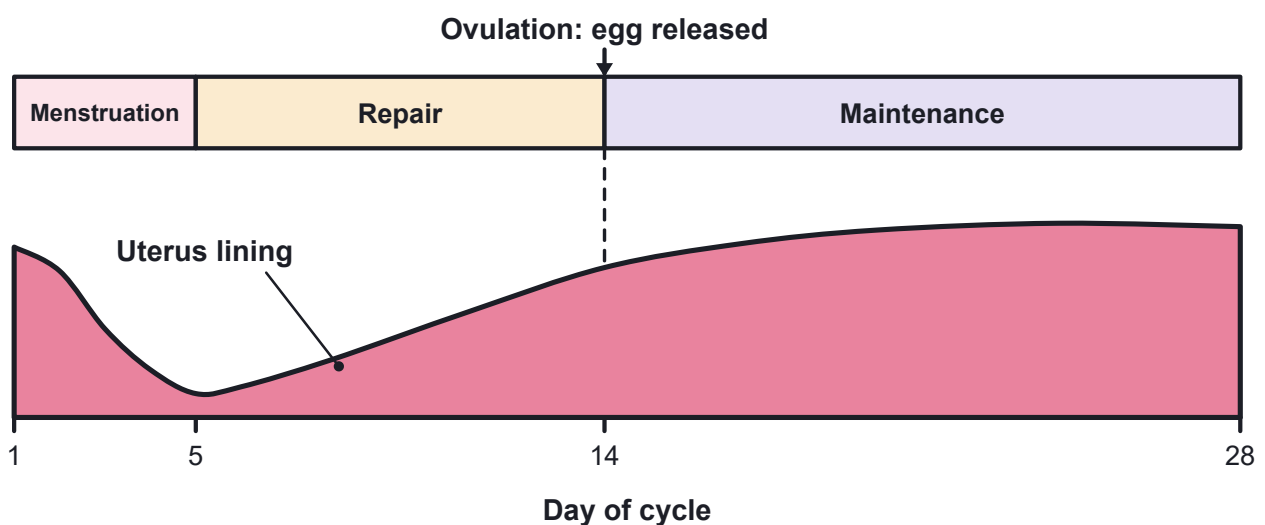
Exam tip: Name the hormone and the organ that makes it: testosterone from the testes, oestrogen from the ovaries. Do not say 'male hormone' on its own.

The menstrual cycle and pregnancy hormones Spec 16.5.2, 16.5.3, 16.5.4

The **menstrual cycle** is a series of changes in the ovaries and in the lining of the uterus. It repeats about every 28 days.

Stages of the menstrual cycle (days are approximate)

Stage	Days	Change in the ovary and the uterus lining
Menstruation	1 to 5	The lining of the uterus breaks down and is lost through the vagina with blood
Repair	5 to 14	An egg cell matures in an ovary. The uterus lining is repaired and thickens
Ovulation	Around 14	An egg cell is released from an ovary into the oviduct
Maintenance	14 to 28	The lining stays thick, ready for an embryo. If there is no pregnancy, the lining breaks down and the cycle starts again



The stages of the menstrual cycle and how the thickness of the **uterus lining** changes.

Supplement

Where the hormones are made

Supplement

Sites of production of the sex hormones

Hormone	In the menstrual cycle	In pregnancy
Oestrogen	Ovaries	Placenta
Progesterone	Ovaries (the empty follicle after ovulation, the corpus luteum)	Placenta
FSH and LH	Pituitary gland	Pituitary gland, but their release is inhibited by progesterone

Supplement

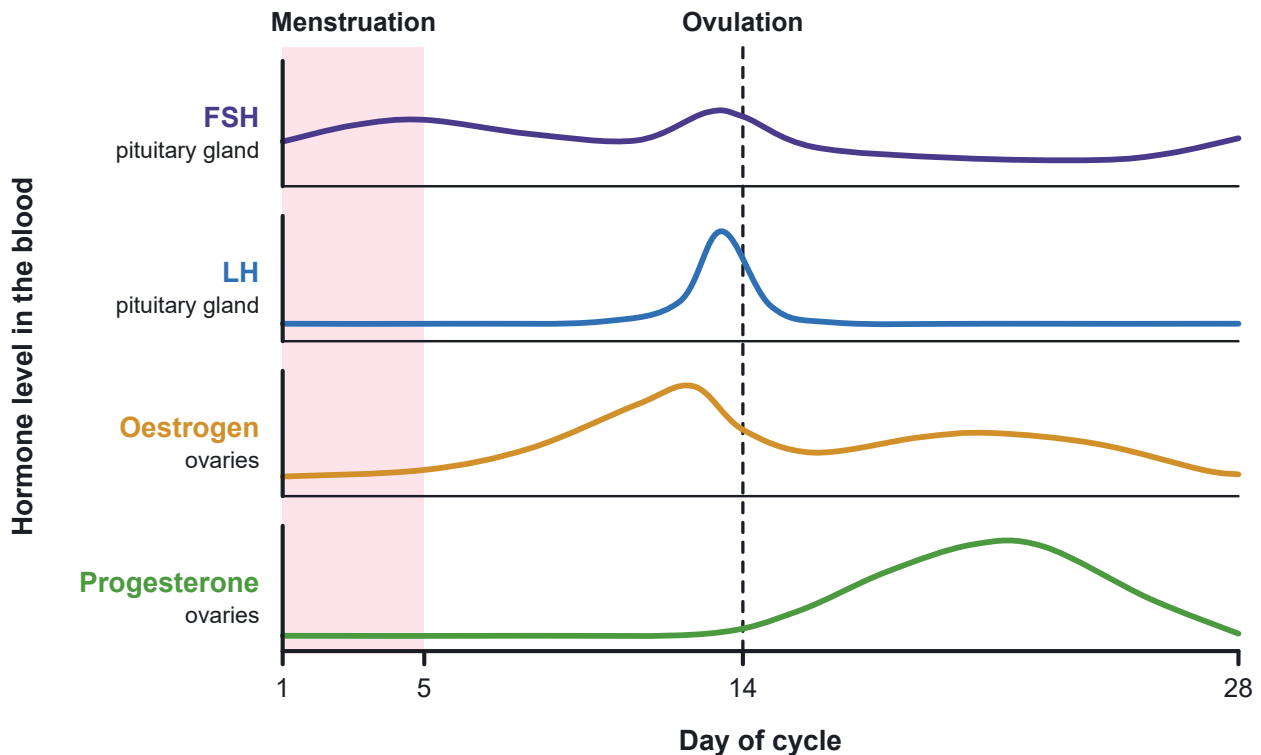
How hormones control the cycle

Supplement

The roles of FSH, LH, oestrogen and progesterone

Hormone	Role
FSH	Causes an egg cell to mature in the ovary. Stimulates the ovary to make oestrogen
Oestrogen	Repairs and thickens the uterus lining. Inhibits FSH. Stimulates the release of LH
LH	Causes ovulation (release of the egg cell) around day 14
Progesterone	Maintains the thickness of the uterus lining. Inhibits FSH and LH

Supplement



Levels of FSH, LH, oestrogen and progesterone. The **LH surge** triggers ovulation around day 14.

Supplement

Hormones in pregnancy

Supplement

If an embryo implants, the **placenta** makes **progesterone** (and oestrogen). High progesterone keeps the uterus lining in place, so there is no menstruation. It also inhibits FSH and LH, so no more egg cells mature or are released during pregnancy. If there is no pregnancy, progesterone falls and the lining breaks down.

Supplement

Exam tip: Say what each hormone does to the next one: 'stimulates' or 'inhibits'. Writing 'oestrogen affects LH' will not score. When you read a hormone graph, quote the day and say whether the level rises, falls or peaks.

Quick check

1. Which hormone is made in the testes?
2. Name two secondary sexual characteristics that oestrogen causes in girls.
3. What happens to the uterus lining during menstruation?
4. **Supplement** Which hormone causes ovulation?
5. **Supplement** Name the organ that makes progesterone in pregnancy.

5 Sexually transmitted infections Spec 16.6

STIs and HIV Spec 16.6.1, 16.6.2, 16.6.3, 16.6.4, 16.6.5

A **sexually transmitted infection (STI)** is an infection that is transmitted through sexual contact.

Human immunodeficiency virus (HIV) is a pathogen that causes an STI. HIV infection may lead to **AIDS** (acquired immune deficiency syndrome). HIV damages the white blood cells of the immune system, so the body finds it harder to fight other infections.

Methods of transmission of HIV

- Sexual contact with an infected person, when body fluids pass from one person to the other.
- Blood-to-blood contact, for example sharing needles used to inject drugs, or infected blood entering a cut.
- From an infected mother to her baby: across the placenta, during birth or in breast milk.

How the spread of STIs is controlled

Methods of controlling the spread of STIs	
Method	How it helps
Using a condom	Acts as a barrier so body fluids cannot pass from one person to another
Not sharing needles	Stops infected blood passing between people
Screening blood used for transfusions	Infected blood is not given to patients
Testing and informing partners	People who are infected can be treated and can avoid passing the infection on
Drug treatment of infected people	Antiretroviral drugs reduce the amount of HIV in the body, which lowers the chance of passing it on, including from mother to baby
Having fewer sexual partners	Reduces the chance of coming into contact with an infected person

Exam tip: A good answer names the method and says how it works: 'use a condom, which prevents body fluids passing between partners'. Do not say that HIV and AIDS are the same thing: HIV is the virus, AIDS is the condition it may lead to.

Quick check

1. What is a sexually transmitted infection?
2. What may HIV infection lead to?
3. Give two ways in which HIV can be transmitted.
4. How does a condom reduce the spread of STIs?

Quick check answers

Asexual and sexual reproduction

1. A process resulting in the production of genetically identical offspring from one parent.
2. Strawberry runners, potato tubers or daffodil bulbs.
3. The fusion of the nuclei of gametes.
4. No, they are genetically different from each other.
5. Diploid.

Sexual reproduction in plants

1. The anther.
2. The transfer of pollen grains from an anther to a stigma.
3. Small and light; smooth surface.
4. Water, oxygen and a suitable temperature.
5. The transfer of pollen grains from the anther of a flower to the stigma of a flower on a different plant of the same species.

Sexual reproduction in humans

1. The sperm duct.
2. The uterus.
3. The nucleus of a sperm fuses with the nucleus of an egg cell.
4. It protects the fetus from knocks and bumps.
5. Pathogens and toxins.

Sex hormones in humans

1. Testosterone.
2. Any two from: breast development, pubic and underarm hair, wider hips, start of the menstrual cycle.
3. It breaks down and is lost through the vagina with blood.
4. LH.
5. The placenta.

Sexually transmitted infections

1. An infection that is transmitted through sexual contact.
2. AIDS.
3. Any two from: sexual contact, sharing needles or contact with infected blood, from an infected mother to her baby.
4. It is a barrier that stops body fluids passing between partners.