2 · Organisation

AQA · GCSE · Biology · Vocabulary in context

Word	Example
tissue /ˈtɪʃuː/	Muscle is a **tissue**.
organ /ˈɔːgən/	The heart is an **organ**.
organ system /ˈɔːgən ˈsɪstəm/	The digestive system is an **organ system**.
enzyme /ˈenzaɪm/	The **enzyme** speeds up the reaction.
biological catalyst /ˌbaɪəˈlɒdʒɪkl ˈkætəlɪst/	An enzyme is a **biological catalyst**: it speeds up a reaction without being used up.
active site /ˈæktɪv saɪt/	The substrate fits into the **active site** of the enzyme.
lock-and-key model	The **lock-and-key model** says only the right substrate fits the enzyme's active site.
substrate /ˈsʌbstreɪt/	Starch is the **substrate** of amylase.
denaturation /ˌdenətʃəˈreɪʃn/	Cooking an egg causes **denaturation** of its proteins.
amylase /ˈæmɪleɪz/	**Amylase** digests starch.
salivary glands /ˈsælɪvəri glændz/	The **salivary glands** make saliva.
pancreas /ˈpæŋkrɪəs/	The **pancreas** makes insulin and digestive enzymes.
protease /ˈprəʊteɪs/	**Protease** digests protein.
lipase /ˈlɪpeɪs/	**Lipase** digests fat.

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Word	Example
simple sugars	Glucose is one of the **simple sugars**.
bile /baɪl/	**Bile** breaks fat into small drops.
liver /ˈlɪvə/	The **liver** makes bile.
gall bladder /gɔːl ˈblædə/	The **gall bladder** stores bile.
emulsify	Bile helps **emulsify** fat into small droplets.
reducing sugar /rɪˈdjuːsɪŋ ˈʃʊgə/	Glucose is a **reducing sugar**, so it turns Benedict's solution from blue to red.
Biuret reagent	**Biuret reagent** turns purple when protein is present.
buffer /ˈbʌfə/	Each tube contains a **buffer** that keeps the pH fixed. pH
double circulation /ˈdʌbl ˌsɜːkjəˈleɪʃn/	Humans have a **double circulation**.
right atrium	Blood from the body enters the **right atrium**.
vena cava /ˈviːnə ˈkɑːvə/	The **vena cava** brings blood back from the body.
right ventricle	The **right ventricle** pumps blood to the lungs.
pulmonary artery /ˈpʌlmənəri ˈɑːtəri/	The **pulmonary artery** carries blood to the lungs.
pulmonary vein /ˈpʌlmənəri veɪn/	The **pulmonary vein** brings blood back from the lungs.
left atrium	Blood from the lungs enters the **left atrium**.

Word	Example
left ventricle	The **left ventricle** has the thickest muscular wall.
aorta /eɪˈɔːtə/	The **aorta** is the largest artery.
valves /vælvz/	**Valves** stop blood flowing backwards.
coronary arteries /ˈkɒrənəri ˈɑːtəriz/	The **coronary arteries** supply the heart muscle with blood.
pacemaker /ˈpeɪsmeɪkə/	An artificial **pacemaker** corrects an irregular heartbeat.
arteries /ˈɑːtəriz/	**Arteries** carry blood away from the heart.
veins /veɪnz/	**Veins** carry blood back to the heart.
lumen /ˈluːmen/	Blood flows through the **lumen** of the vessel.
capillary /kəˈpɪləri/	A **capillary** has walls only one cell thick, so things pass through easily.
trachea /trəˈkɪə/	The **trachea** carries air down to the lungs.
bronchi /ˈbrɒŋkaɪ/	The trachea splits into two **bronchi**, one for each lung.
alveoli /ˈælvɪɒli/	Gas exchange happens in the **alveoli**.
plasma /ˈplæzmə/	**Plasma** is the yellow liquid part of blood.
red blood cells /red blʌd selz/	**Red blood cells** carry oxygen.
haemoglobin /ˌhiːməˈgləʊbɪn/	**Haemoglobin** in red blood cells carries oxygen.

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Word	Example
white blood cells /waɪt blʌd selz/	**White blood cells** fight germs.
platelets /ˈpleɪtlɪts/	**Platelets** help blood to clot.
coronary heart disease /ˈkɒrənəri hɑːt dɪˈziːz/	Smoking can cause **coronary heart disease**.
stent /stent/	A **stent** holds a narrowed coronary artery open.
statin /ˈstætɪn/	A **statin** lowers the amount of cholesterol in the blood.
cholesterol /kəˈlestərɒl/	**Cholesterol** in the membrane keeps it from becoming too runny or too stiff.
health /helθ/	**Health** means physical and mental well-being.
communicable diseases	Measles and flu are **communicable diseases**.
non-communicable diseases	Heart disease and most cancers are **non-communicable diseases**.
risk factor /rɪsk ˈfæktə/	Smoking is a **risk factor** for lung cancer.
positive correlation /ˈpɒzɪtɪv ˌkɒrɪˈleɪʃn/	There is a **positive correlation** between heat and ice cream sales.
cancer /ˈkænsə/	Smoking can cause **cancer**.
benign tumour /bɪˈnaɪn ˈtjuːmə/	A **benign tumour** stays in one place and does not spread.
malignant tumour /məˈlɪgnənt ˈtjuːmə/	Cells from a **malignant tumour** can spread in the blood.

Word	Example
carcinogen /ˈkɑːsɪnədʒn/	Tar in tobacco smoke is a **carcinogen**: it can cause cancer.
epidermis /ˌepɪˈdɜːmɪs/	The **epidermis** covers the leaf.
waxy cuticle /ˈwæksi ˈkjuːtɪkl/	The **waxy cuticle** reduces water loss from the leaf.
palisade mesophyll /ˈpælɪseɪd ˈmesəfɪl/	**Palisade mesophyll** cells contain many chloroplasts for absorbing light.
spongy mesophyll /ˈspʌndʒi ˈmesəfɪl/	Air spaces in the **spongy mesophyll** help gases diffuse.
guard cells /gɑːd selz/	**Guard cells** open and close the stomata.
stomata /ˈstəʊmətə/	Gases enter the leaf through the **stomata**.
meristem /ˈmerɪstəm/	**Meristem** tissue is found at the tips of roots and shoots.
xylem /ˈzaɪləm/	The **xylem** carries water up the plant.
phloem /ˈfləʊɪm/	The **phloem** carries sugar through the plant.
sieve tubes	Sugars move through living **sieve tubes**.
lignin /ˈlɪgnɪn/	**Lignin** makes the xylem walls strong.
sieve plates	**Sieve plates** let sugar solution pass from one cell to the next.
translocation /trænsləʊˈkeɪʃn/	**Translocation** moves sugar through the phloem.

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Word	Example
root hair	Each **root hair** gives the root a bigger surface for taking in water.
osmosis /ɒzˈməʊsɪs/	Water enters the root by **osmosis**.
partially permeable membrane /ˈpɑːʃəli ˈpɜːməbl ˈmembreɪn/	Water crosses a **partially permeable membrane** by osmosis.
active transport /ˈæktɪv ˈtrænspɔːt/	**Active transport** uses energy to move ions into root cells.
transpiration /trænspəˈreɪʃn/	**Transpiration** is the loss of water from leaves.
potometer	A **potometer** measures how fast a shoot takes up water.