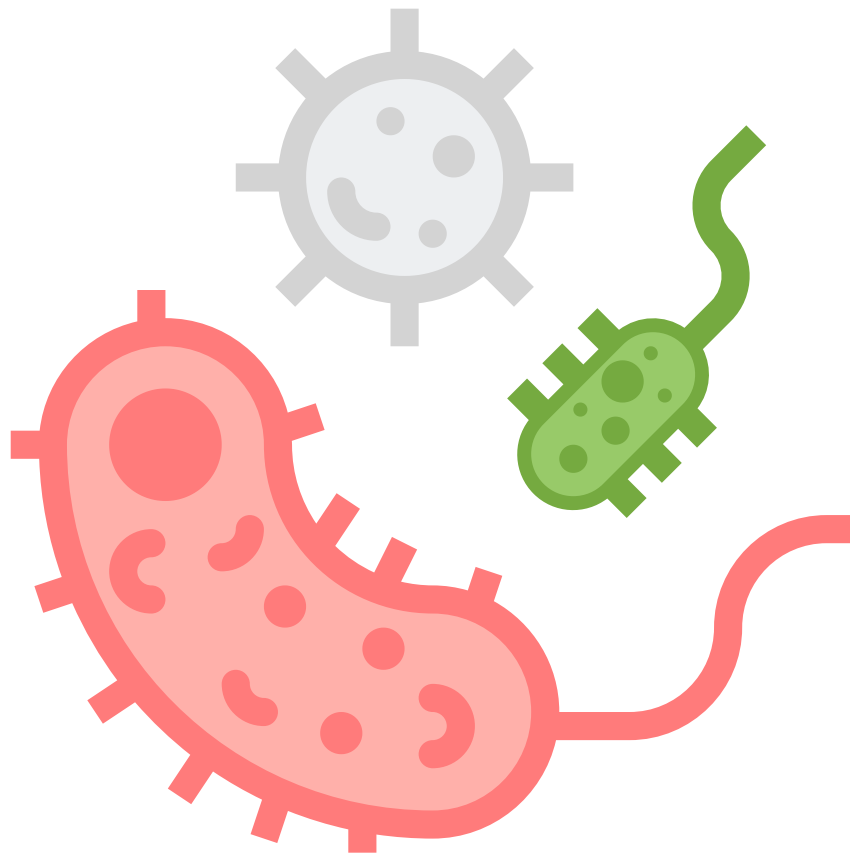


Biology



GCSE

Key Vocabulary

Definitions and morphemic analysis



Introduction

This booklet helps support the explicit teaching of GCSE vocabulary. The words have been chosen for their relevance to the subject as well as their morphemic analysis.

Students undoubtedly need to understand subject specific vocabulary for their studies, but knowing the morphemic analysis will also allow students to make connections across the subject, across the curriculum and hand them the ability to find meaning at the point of need.

Each of the Key Vocabulary booklets could be handed to the students for their own study, but below are some possible teaching ideas.

Some teaching ideas:

Ask students – what does it mean and how do you know?
Display the word with its definition or morphemic analysis.

All students discuss the potential meanings.

Display the morphemic analysis.

Explore how understanding the morphemes (prefixes, suffixes and stems) allows them to find the meaning and develop a gist understanding without having to have a full definition.

Explore vocabulary with shared morphemes. Are there common morphemes shared within particular topics? Where else have they encountered vocabulary with those morphemes?

Use new vocabulary in their own writing, both narrative and academic.

If you're interested in exploring the explicit teaching of vocabulary visit enquiries@lexonik.co.uk and ask about Lexonik Vocabulary Plus, a morphemic analysis and explicit vocabulary instruction platform.



Vocabulary

GCSE Biology



absorption

- the process of soaking up substances, e.g. nutrients through the wall of the intestine

Morphemic analysis

/ ab / away - Prefix

/ sorb / suck in - Stem

/ tion / act, process result - Suffix

cytoplasm

- a jellylike substance in cells where chemical reactions take place

Morphemic analysis

/ cyto / cell - Prefix

/ plasm / a growth, a development; something molded - Suffix

differentiation

- the result of cells becoming specialised for their roles

Morphemic analysis

/ dif / away, not, reverse - Prefix

/ ate / make into, become; put into action; treat with - Suffix

/ tion / act, process, result - Suffix



Key Vocabulary

GCSE Biology



diffusion

- the process of particles of a substance moving from a high concentration to a low concentration

Morphemic analysis

/ dif / away, not, reverse - Prefix

/ fus / mix, pour, melt - Stem

/ sion / act, process, result - Suffix

mitochondria

- the tiny structures in cells where glucose and oxygen are turned into energy

Morphemic analysis

/ mito / thread - Prefix

/ ia / medical condition, state of, quality of - Suffix

translocation

- in genetics, when part of a chromosome is transferred to another chromosome

Morphemic analysis

/ trans / across, through - Prefix

/ loc / place - Stem

/ tion / act, process, result - Suffix



Key Vocabulary

GCSE Biology



chlorophyll

- a green pigment in plants which absorbs light energy for photosynthesis

Morphemic analysis

/ chloro / green - Prefix

/ phyll / leaf - Suffix

oxyhaemoglobin

- formed when haemoglobin absorbs oxygen

Morphemic analysis

/ oxy / blood - Prefix

/ haemo / oxygen; sharp - can be 'oxi' - Prefix

phototropism

- plant growth stimulated in response to the source of light

Morphemic analysis

/ photo / light - Prefix

/ trop / turn - Stem

/ ism / abelief, system, practice; condition of - Suffix



Key Vocabulary

GCSE Biology



mutation

- a change in an organism resulting from alterations to chromosomes

Morphemic analysis

/ mut / change, go, move - Stem

/ ate / make into, become; put into action; treat with - Suffix

/ tion / act, process, result - Suffix

metabolism

- the chemical processes that occur within a living organism in order to maintain life, e.g. in the human body, breaking down nutrients for energy

Morphemic analysis

/ meta / about itself; beside, beyond; change - Prefix

/ bole / throw, put - Stem

/ ism / belief, system, practice; condition of - Suffix

invertebrate

- the name given to an animal that does not have a backbone; vertebrae are the small bones which make up the spine

Morphemic analysis

/ in / in, into, on; not; very - can be 'en' - Prefix

/ vert / bend, turn - can be 'vers' - Stem

/ ate / make into, become; put into action; treat with - Suffix



Key Vocabulary

GCSE Biology



photosynthesis

- the process by which green plants and some other organisms use sunlight to create glucose and oxygen from water and CO₂

Morphemic analysis

/ photo / light - Prefix

/ syn / together, with - Prefix

/ thesis / a proposition, a statement, a thing laid down - Suffix

diaphragm

- a thin, dome-like layer of muscle stretched underneath the lungs, which moves up and down, causing the lungs to breathe air in and out

Morphemic analysis

/ dia / across, through, apart - Prefix

amylase

- enzyme that converts starch into simple sugars

Morphemic analysis

/ ase / enzyme - Suffix

