BBC BITESIZE

Hello. I'm Dr Alex Lathbridge and this is Bitesize Biology.

This series is all about exam techniques. Advice, tips and tricks that you'll need to help pass your exam. Today, we're going to recap some key terms for you and we're going to go through the spelling.

Throughout Bitesize Biology I've thrown loads of new words at you.

In biology there are lots of words that you need to know that most people don't use in everyday life.

What that means is that these words can be hard to remember and even harder to spell.

Don't worry, not knowing how to spell things is nothing to be embarrassed about. It's just a part of learning new things and broadening your horizons.

Your examiner is looking for you to use as many of these key terms as possible in your exam, correctly.

So, it's really important that you really have them at your fingertips.

Grab a pen and write these words down with me.

Maybe you can maybe use this list to make some flash cards later on to test yourself with?

Let's start with pairs of words that are really easy to get muddled up. Pay special attention to these, because if you don't spell these correctly the examiner might think you mean something else, and you won't get a mark.

Antibiotic. These are substances that kill bacterial pathogens, or stop them reproducing

Antigen. A protein found on the surface of a substance (often a pathogen), and triggers white blood cells to produce antibodies.

Chloroplasts. These are the site of photosynthesis and they contain the green pigment chlorophyll.

Chlorophyll. This is the green pigment inside chloroplasts, that absorb light during photosynthesis

Remember: chloroplasts are filled with chlorophyll

Genotype. This refers to the genes and alleles that you have.

Phenotype. Those are the physical characteristics that you have.

Remember: genotype with a g = genes, phenotype with a ph = physical.

Glycogen. That's a molecule that glucose is converted into and stored in the liver and muscles.

Glucagon. That's a hormone released by pancreas when blood glucose is too low.

The next pair are easy to get confused:

Heterozygous. Where you have two alleles for the same version of a gene that are different.

Homozygous. Where you have two alleles for the same version of gene that are the same.

Remember: hetero means different and homo means the same.

Another two that are really easy to confuse: meiosis and mitosis.

Meiosis. That's a type of cell division that occurs in reproductive organs to produce gametes.

Mitosis. Which is cellular division for growth and repair and produces daughter cells identical to the parent.

Meiosis and mitosis: very similar spelling for different processes, watch out for this one!

Now onto cells, there are two types:

Eukaryotic Cell. A single-celled organism or a cell of a multicellular organism that has a nucleus.

Prokaryotic Cell. A single-celled organism that does not have a nucleus.

Remember you are a eukaryotic organism, and you should be very pro prokaryotic cells, because they're useful things like bacteria.

And here are some words that lots of people find tricky to spell.

Scientists love their long and complicated words, because it makes us feel better than you.

Have a go at spelling these and remembering what their definition is:

Cytoplasm. That's the living substance inside a cell (not including the nucleus)

Remember it's that really useful jelly inside cells? (This is not the definition and don't use this in an exam!)

Anomalous result. A result that is very different from the rest of the results.

Lymphocytes. That’s a type of white blood cell that attacks invading pathogens by producing antibodies.

Mitochondria. Those are structures inside the cytoplasm of all cells where aerobic respiration takes place.

Osmosis. That’s the movement of water molecules across a selectively permeable membrane from a region of higher water concentration to a region of lower water concentration.

Photosynthesis. That’s the process used by plants, using light energy, converting carbon dioxide and water into glucose and oxygen

Respiration. That’s a process that occurs in the cells of all living organisms, releasing energy from glucose.

Remember, aerobic respiration uses oxygen; anaerobic respiration happens without oxygen.

Don’t get overconfident now, these aren’t the only words you need to know, but it’s a very good start.

Use this to make your own list and add to it when you come across other words that you need to remember.

And just quickly, remember to keep an eye on your handwriting in the exam. If your examiner can’t read your writing, they won’t know if you’ve said the correct word or even if you've spelled it right.

Maybe try and get some time to practice your handwriting? You could show it to people around you, friends, or maybe a teacher, and see if they can read it.

I’m Dr Alex Lathbridge and this is Bitesize Biology. To listen to the rest of this series and the other Bitesize podcasts, search Bitesize on the BBC Sounds app.