

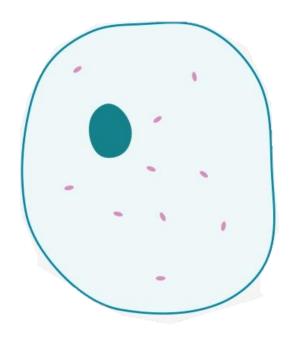
Pearson BTEC Level 3 National Extended Diploma in Applied Science Biology



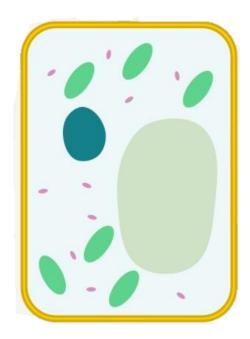
What do you know from GCSE?

Can you draw a simple animal or plant cell?

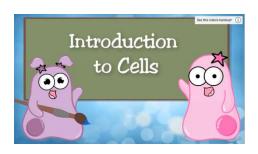
If so it would most likely look like the cells below.....



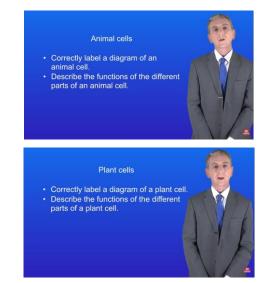
Can you label the simple components of an animal cell?



Can you label the simple components of a plant cell?



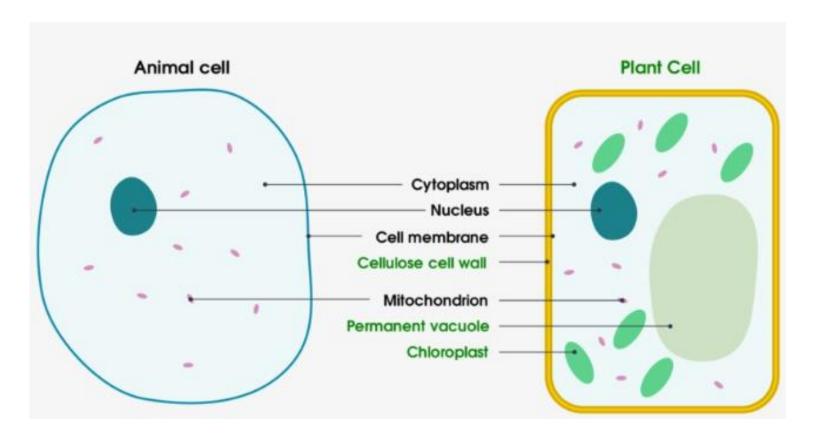
You may have watched videos like the one above or those below during high school, to help learn basic cell organelles. Click on each for a reminder and label the cells to the left





What do you know from GCSE?

If you labelled the cells correctly, you should have come up with answers such as these:



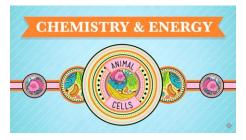


Watch the videos above and below. Then draw and label these new organelles onto your original diagram.

Above is very specific and informative.

Below, are a little more 'fun' with correct information also







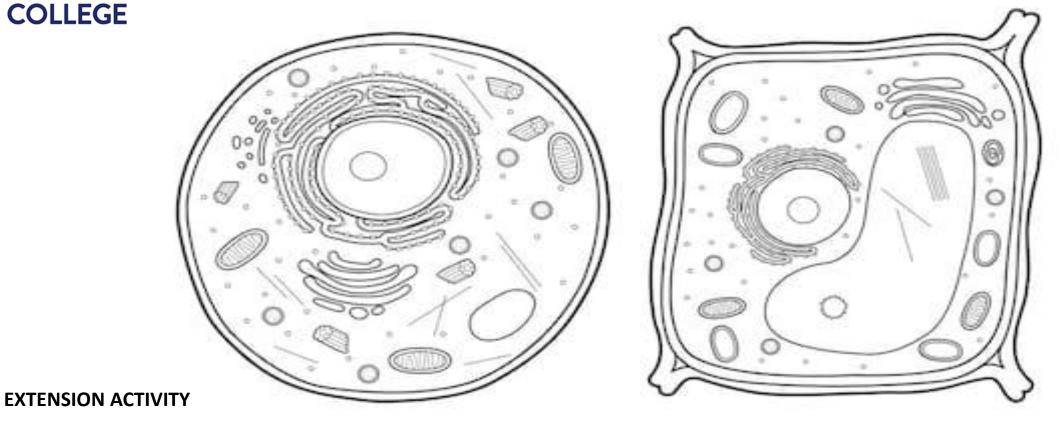
Biology in Vocational Science

Plant Cell **Animal Cell** cell wall pinocytotic cell membrane vesicle mitochondrion Golgi vesicles Golgi apparatus lysosome ribosome Golgi Golgi chloroplast apparatus smooth ER vesicles (no ribosomes) vacuole nucleolus membrane nucleolus rough ER nucleus (endoplasmic reticulum) nucleus rough ER (endoplasmic raphide smooth ER reticulum) crystal (no ribosomes) centrioles (2) Each composed of 9 druse microtubule triplets. large central crystal vacuole microtubules mitochondrion amyloplast (starch grain) cell (plasma) cytoplasm membrane cytoplasm ribosome C E.M. Armstrong 2001 C E.M. Armstrong 2001

For many topics, we will take what you have learnt in GCSE, consolidate that theory and then build on it with more detail. In this topic for example, you learn about many more organelles in plant and animal cells, as well as their functions.



Have a go for fun – from memory. How many of these organelles can you label?

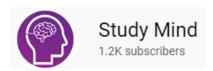


Can you describe their function also?

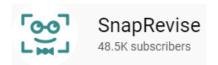


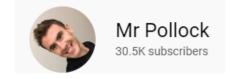
Useful links and videos

There are lots of useful videos on YouTube to help consolidate your learning in Level 3 Biology. Below are just some of the YouTube users who regularly upload specific Biology videos:









We often use videos in Biology to 'flip learning'.

If you have a YouTube account, it may be useful to subscribe to their pages in advance, so you can watch the relevant videos prior to learning the new content



So, what can you do in preparation for college?

In the first year of Biology, you will learn about;

- Cells (animal, plant, bacterial, viral) and Tissue (epithelial, nervous, etc)
- The Nervous System (reflexes, neurones, synapses)
- Muscles (different types, how they work)
- Microbiology (organisms that cause disease, how to treat them)
- Anatomy and Physiology (Musculoskeletal, Lymphatic, Digestive)
- And much much more......



Read ahead. Gain confidence. Enjoy Biology

Make sure you are confident coming to college with the content learnt during your GCSE years.

Biology at college builds on this content. Many of the topics you will have already learnt. We just add to it in more detail.

There are many new topics also though, so a solid understanding is vital to succeed.

Use your high school notes and read ahead over the summer. You may also wish to invest in a GCSE revision guide to help with this.

Good Luck

