

# A Level Biology – summer work 2018

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**These tasks will help to bridge the gap between the knowledge required at GCSE and that required at A level. You will need to carry out some research to enable you to complete these tasks. The work will need to be handed in at the beginning of year 12.**

## **You must**

- Complete a table to compare a prokaryotic cell with a eukaryotic cell.
- Draw a typical eukaryotic cell. Label the organelles. This should include: rough endoplasmic reticulum, smooth endoplasmic reticulum, Golgi apparatus, lysosomes, nucleus, centrioles, mitochondria and ribosomes. Annotate your diagram to describe the function of each organelle.

## **You should**

- Describe the advantages and disadvantages of using a light microscope and an electron microscope. You should use correct spelling, punctuation and grammar. Include examples of images from each type of microscope and explain how they are different and in what situations they would be most useful.

## **You could**

- Describe the difference between a scanning electron microscope and a transmission electron microscope. Include examples of images and describe the difference between the images.