

# Information for students aiming to study Biology A level starting September 2016

In the first 3 weeks of your A level Biology we will be teaching you some core topics that will support your learning throughout the course.

These topics will build on what you know from GCSE but will also be quite challenging.

We will test you each week on what we have covered.

Please have a look at the list of topics below. You might want to revise what you have learnt at GCSE on these subjects so that you are well prepared for your new course. Also you can, if you wish, read ahead in any A level style text book or on-line resource, and find out the sorts of things you would be expected to know at A level.

## Biological Molecules

The roles of inorganic ions in Biology. For example the ions of Sodium, Potassium, Calcium Magnesium Iron, Nitrate and Phosphate.

The structural formulae of Glucose, Fatty Acids and a simple Amino Acid

## DNA

The shape of DNA, the names of the bases on DNA and the way they pair. The nature of the genetic code, with reference to the way that amino acids are coded for by three DNA bases. How DNA is used to make mRNA, and how this is used as a template for making proteins.

## Math skills for Biology

Standard form

Median, Mode and Mean

Conversions between volumes and areas with different units (for example – how many  $\text{mm}^3$  in  $4\text{cm}^3$ )

Volumes of solid objects – rectangles cubes and spheres.

