## Achieving success in Biology at A-level.

A-level sciences are demanding subjects and it takes a good deal of hard work by both students and teachers to achieve the kind of grade that is required to enter a top university or to study medicine or veterinary science, for example.

The good news is that the Science Department at TGGS has an excellent record of achievement and we can help you gain the best grades possible at A-level. In order to do this though you may have to make commitments that other students working in other subjects do not have to make. This will mean preparing work over the summer break, and may mean giving up a lunch time each week in order to receive extra support with particularly difficult parts of the syllabus.

The Science Department knows that it is important to gauge the strength of your understanding as early on as possible. It means that we can give you the support that you need from the very beginning. Not every student needs support, some may need it occasionally and some may need it regularly.

In order to make a decision about the level of support you need, we will do two things. First, we ask you to complete the summer work (see following page).

After approximately two weeks in school, you will be given a short test based on the transition work and work that you have covered in class. Using the scores from the tests we will then make a decision about the level of support we feel you need.

Enjoy your summer, and we look forward to seeing you in September.

Yours sincerely

Mrs K Bumby
Head of Science & Biology

## A level Biology

## **Transition Work**

In September, you will be able to purchase an AS textbook through school. In the meantime, please use the internet to complete the following.

 Construct a table with the following headings which summarises the structure and function of the following cell structures: nucleus, smooth endoplasmic reticulum, rough endoplasmic reticulum, Golgi apparatus, lysosome and mitochondrion. An example has been given:

		Image seen when viewed with a				
Name of organelle	Labelled diagram	Light microscope	Transmission electron microscope	Scanning electron microscope	Structure	Function
ribosome	P site Tunnel Growing peptide chain	Not visible			The smallest organelle in the cell. Made of rRNA and protein, divided into two subunits.	Site of protein synthesis.  mRNA from the nucleus carries the code to determine which amino acids are joined together to form a protein

- 2. Describe and explain digestion in each part of the alimentary canal.
- 3. Write summary notes on 'Carbohydrates: monosaccharides, disaccharides and polysaccharides'.