

## VCE Biology Units 1 and 2 – 2015

### Introduction

You're now in a new phase of your education. Hopefully what you learnt in year 10 will help you in VCE Biology and even if you didn't go as well as you might have thought, you get a new chance this year to improve.

You should expect about 2 to 3 hours a week on Biology at home. This includes reading the relevant chapters (pre-reading before class as well as reviewing the text after lessons), working through all questions specified and progressively preparing for your exam, as everything you learn is examinable.

### Help

Every one starts off thinking that they don't need help. However, in reality there are few such fortunate individuals. Don't say, "I can't do it". You need to start by helping yourself. How?

### Ways of helping yourself

- Pinpoint areas or ideas you don't understand and do something about them immediately. Do not leave it until exam time.
- Come to our Wednesday night homework class
- Ask questions in class. Chances are that other students much shyer than you are thinking about the same problem.
- Ask friends for help: get together in the library on a regular basis and support each other.
- Re-read the chapter and answer the questions.
- Go to the library and look up textbooks.
- Use a Biological Dictionary.
- Go and see your teacher at lunchtime or after school.
- Keep lines of communication open
- Revision, Revision, Revision.

### Developing successful study habits

The most important thing to studying is **Attitude**. Ask yourself ... Do I want to learn? How much effort will I put in? If you want to learn ... then **Think Positively**.

### Why Study?

Knowledge is Power! The more you know the more you can be!

- Take short breaks between study sessions in the evenings. This helps you recharge and focus.
- Don't fall into the trap of spending all night on one task.
- Plan to complete long-range tasks by organising regular times throughout the weeks available.
- Make your own study timetable and stick to it.
- Rest and recreation are vital and aid efficient study habits. Be realistic and don't over do it. It is difficult to study when you are physically tired.
- Make lists in order to priorities assignments/work.

### **How to Organise Yourself:**

You may wish to have the following for Biology:

- Ring binder
- Coloured dividers
- Loose leaf paper (some graph paper too)
- Plastic pockets
- Pens, pencils, etc.
- Text book (*Nature of Biology Book One* 4<sup>th</sup> Edition 2012)
- *Year 11 Biology : Student Workbook 2015* by Biozone

## Scientific Writing

### **Some Important Information about Scientific Writing**

When scientists carry out research or need to communicate with one another, they need to follow certain protocols. Communication in scientific research is done in journals. Reports are written in a certain way that all scientists, regardless of country or culture, can easily tell one another what is being discussed. Reports are written in the **Scientific Method**. You will need to submit your reports in the following format.

**Aim:** This states what you want to find out.

**Hypothesis:** States your theory about what may happen including:

**Experimental (Independent) Variable:** The single variable that the experimenter is testing

**Dependent Variable:** The variable being measured

**Controlled Variables:** Variables that are being controlled for that may influence the dependent variable

**Control Group:** The standard of comparison for the experiment. All factors in the control are the same as the experiment, except for one factor that you are testing.

**Equipment/Apparatus:** Lists the equipment or set up that you will need.

**Method:** Details how you carried out your investigations. It is usually written in point form. This is very important and should be written in a way so that someone else could follow your method and repeat your investigation.

**Results/Observations:** These are very important. This lists what you have noticed, by using all your senses. Results and observations may be recorded in a table.

**Discussion:** You should discuss your results; what happened and why. Graphs are often used to explain a table. If your results are not what you expected, you should try to give a reason why they are different to expectations. Use references and other books to help discuss your results.

**Conclusion:** Although this is short, a conclusion is necessary to summarise briefly what you have discovered. The conclusion should answer your aim. This should be no more than 3 – 4 sentences.

**Bibliography:** List of ALL material used. Including web pages, books, journal articles, apps, etc. Must be set out using either the *Harvard Referencing System* or the *APA Referencing System* (<http://www.library.unimelb.edu.au/cite/>)

### **Holiday homework**

1. If you weren't in transition classes, read the introductory materials provided
2. Chapter 1 Quick Check questions and Chapter Review Questions
3. Chapter 2 Quick Check questions and Chapter Review Questions