



**A Level Biology Induction
&
Holiday homework in preparation for September**



Welcome to A level biology. We are hoping that you are looking forward to the challenge of furthering your interest, knowledge & understanding of this amazing subject. Whether you have studied biology or the combined science route for GCSE it is vital that you prepare over the summer and practice the independent learning skills that are essential for the sixth form. This year in particular, you will have had a long break since you were last in school!

Summary of expected work over the summer:

1. **Work through the attached ppt & learn the heart and the cardiac cycle** in preparation for an induction test that will take place the first week back.
You should be able to....
 - Label a diagram of the heart
 - Explain the need for a transport system in multicellular animals
 - Recall the difference between single & double circulation systems
 - Describe the structure of arteries, veins and capillaries
 - Use a magnification scale to calculate actual size
 - Describe the cardiac cycle

2. Research & write about **'Risk factors for CHD'**
Your account should be no more than 2 sides of A4 written in your own words & can include suitable diagrams.

3. **During induction you completed the practical below.**
Write up practical investigation 'Does caffeine effect the heart rate of daphnia'
 - a. **Hypothesis**
 - b. **Background information** (state sources)
 - c. **Method** including variables
 - d. **Risk assessment**
 - e. **Ethical considerations**
 - f. **Results table**
 - g. **Suitable graph**
 - h. **Conclusion**
 - i. **Evaluation**

If you were unable to attend induction please watch the video:

<https://www.youtube.com/watch?v=FPX8hO8y6cQ>

Write a plan for this investigation including points a – e above.

Good luck and have a fantastic summer holiday. We look forward to teaching you in September.

Mrs Moffett & Mrs Sutliff