GCSE to A LEVEL

Summer Project

Name:

Subject: A Level Biology

The purpose of this A Level summer project is to introduce you to studying this subject at A Level standard. You will need to complete 10 hours of study on each subject every week, $4\frac{1}{2}$ in class with your teacher and the rest as independent learning. Therefore, it is important that you enjoy this subject and that you start to practice your study skills as early as possible. Some subjects have significant maths content (for example business, psychology, economics); others require strong essay writing skills (for example history, English). Think about the study skills and underpinning knowledge you will require in this subject - not just the title.

If after completing this project you think this may not be your ideal choice, you can ask to transfer to another subject at the start of term, as long as you have the entry requirements and it fits alongside your other choices on the A Level Matrix (timetable). If you do decide to change subject, you will be required to complete the transition project for your new choice too.

This is also your first taste of Flipped Learning and elements will be used within your first week of lessons.

Please ensure your name, student number and subject are clearly noted on each page and bring it with you to hand in at Induction.

We hope you enjoy this project as you start your A Level journey.

Have a good summer and we look forward to seeing you in September.

HOW TO SUBMIT:

Instructions on submission are given at the end.

Welcome to A Level Biology - (Edexcel Biology B).

At the start of the course you will need to purchase the following

• **text book** Pearson Edexcel A Level Biology Student Book (Year 1 and Year 2) Publisher: Hodder Education



ISBN: 9781510469938

Currently £38.99 on the Pearson website

• Core practical lab book



Currently £2.50 from Amazon

• A lab coat to carry out laboratory work. This can be purchased in college in September and there are some repurposed lab coats available at a cheaper price.

To every biology lesson you are also expected to bring:

- an A4 ring-binder folder,
- lined paper
- pens, pencils, ruler and scientific calculator

You will be provided with some workbooks and worksheets throughout the course, but you will be expected to print off some key material e.g. exam questions and flipped learning pre-work.

The getting ready work below is your first chance to see the level you will be studying at in Biology. All work must be in your own words and not copied.

Task 1: You will be producing a poster presentation on an endangered species. Below is an example of what a scientific poster looks like.

Biochar in	southern central coasta	Children	
Hosng Minn Tami, Ho Huy Cixing, Nguyen Trail Cungi, Hoang Winh, Peter Blavchi, Brad Kseni, I Southern central coastal Vietnam The southern central coastal or winges of			
Vielnam and home to Vietnam's postrast w Vielnam and home to Vietnam's postrast farmers. The region is characterised by low relinfal and 500 000 ha of sandy soils developed mostly from weathered granite.	T3.double bund + blochar + fett liser T3.double bund + blochar + ½ rate fertiliser T4.single bund + % rate fertiliser.	indicate a positive yield response to blochar amendments for both eachew and groundhut when used in combination with farth sers	
Approximate production on these points Approximate production on these points is imited by their low water and puttern to drag capacity. The cross such as caches and mango, intercopped with periods and costava, are wately grown in the region Table appear are also pointable in high	Experiment 2. Groundhul, Biochar 107 fm ⁻¹ T1, contra - no nputs T2, marue 61ha T3, NPK (\$9.90.60) T4, biochar T5, marue (\$1.6.1] + NPK (\$0.90.60)		
Table griges are asoproduced in virus Thuan province. Biochar in Vietnam As one of the largest producers of rice Vietnam	T6, blochar manure 5t ha? T7, blochar + NPK (30:90:63) T8, blochar manure 5t ha 1+ NPK (30:90:63).	CL P 2 D D TA TA TA A ST Traitweet Figure 2: Experiment 2: Ground nut yield Looking forward	
enald patentially produce large volume all biostramhamhae halls. A nos tuil oftaar product with a contract of the large product productor as a sy product of the ontage nos calle intractivity. The feel half dark is used to the mussey industry mother incomers has provide as an amendment to improve the sandy coils of southern overhall Vietnam.		Dotating or where Results from the first cosine without with the ready to nonsysta and of turns. Data will naive be caregorized and accord cosine or up yield to be caregorized in 2010. Data for the tast growthand or to some thy being analysed. The analysis will include an assessment of the import of another an sole somethics and plant when uptake. A second growthat ong with any and yield.	
Two field experiments were established in early 2009 as part of an AC UR funded project. Here hull electrar (33% C) used in the experiments was sourced from the Philipines.	T T T TA TA TA	during the 2009 web season. An include the Construction on Advance Flagson Advance of the Construction of the Construction of the Advance of the Construction of	

1: To choose your endangered species (animal or plant)

- visit the IUCN Red List of threatened species <u>https://www.iucnredlist.org/en</u>
- click on advanced search
- On the left hand side click onred list category to bring up a drop down menu
- Now check the boxes for either Critically Endangered (Cr) or Endangered (En)
- Now you can just scroll through the species until you find one that interests you.
- You can put additional filters on to narrow your search or you can simply search a species by its common name if you already have one in mind. It must however be in one of these two red list catagories.

2: You should then produce a poster presentation including the following sections.

- The name of the species. This should include the common name (if there is one) and its binomial Latin name. This will appear at the top of the page in italics and will consist of two parts: A genus name and a species name. e.g. If you were producing a poster on the Red Panda, this would be its common name whereas *Ailurus fulgens* would be the binomial name. *Ailurus* is the genus name and *fulgens* the species name.
- Include a photograph of the species.

- Additional information on this species including: The regions of the world it can be found in (geographic range); what habitat it is found in; current estimates of population size;
- Details of its red list status; is it endangered or critically endangered;
- Details of the threats it faces (reasons for being endangered);
- Details of any conservation actions in place;
- Include a reference. Whenever you use a source of information, whether it is a book, journal or online resource, you must always reference where you have gotten the information from. In this case the reference can be found near the top of the first page and is in this format
 - Glatston, A., Wei, F., Than Zaw & Sherpa, A. 2015. Ailurus fulgens (errata version published in 2017). The IUCN Red List of Threatened Species 2015: e.T714A110023718. <u>https://dx.doi.org/10.2305/IUCN.UK.2015-4.RLTS.T714A45195924.en</u>. Accessed on 11 May 2023.

How to design your poster

This should be A3. You can use one slide of a PowerPoint and set it to A3; in Word set to A3 (using small font to fit all the words and sections on). Alternatively, you can use an A3 piece of paper and stick everything on. In this case, all writing should be either a cut out from your research paper or produced on word and printed out to be stuck on. Be as creative as you like. Your name should be clearly displayed on the poster.

If you search for 'how to produce a poster presentation in PowerPoint' there are several videos that can help with this.

Please submit your completed poster to: <u>Alevel_Biology@chichester.ac.uk</u> before the start of term.

Task 2: Using the knowledge you have gained from completing your poster, follow this link to complete a multiple choice quiz:

https://forms.office.com/e/SQp5VsJCta

If you have any problems accessing this link, please email on the above email and you will be sent an electronic link.