

Sturminster Newton High School Sixth Form

Environmental Science Transition Project

Board:AQAType:GCE A LevelSchool:Sturminster Newton High SchoolContact:Mr Ling (4179sl@mysnhs.net)



This pack contains a programme of activities and resources to prepare you to start your AQA Environmental Science A Level course. It is aimed to help ensure you have all the background knowledge that you need for a smooth transition to A level study.

The main website for your course is: <u>https://www.aqa.org.uk/subjects/science/as-and-a-level/environmental-science-7447</u>

Introduction

Environmental science is a relatively new scientific discipline. Your studies will range from how we can better understand and manage the atmosphere of the whole planet, to local animal eco systems.

The most important skill you can bring with you to the Environmental science course is a genuine interest and curiosity about the world around you. Only by asking big questions can we solve big problems.

By the end of this transition work you will have a sense of some of the big challenges facing the world, and the concepts you'll need to learn to better understand and contribute to solving them.

Information and resources

Core Textbook, Specification, Example notes (older spec, but still useful)

Transition Project tasks

I would like you to achieve three things with your transition project for environmental science. Firstly, I want you to find what about the subject interests and excites you. There's so much to understanding the environment I want you to see where your curiosity leads.

Secondly, I want you to consolidate your key learning from GCSE. I have chosen one topic from the Physics, Chemistry, and Biology courses that I'd like you to review and revise, as confidence with this content will help you across the course.

Finally, I want you to really get stuck into some higher-level learning. Studying at A level is very different to GCSE. Your learning is more self-led, and you get to go into greater depth in subjects you've chosen. I have found a range of free online courses with excellent resources and teaching. They can all be completed for free, and it's up to you which you choose to dive into.

Preparing your notes and folders

The way you study at level is quite different to GCSE, both in terms of the organisation of your notes and the level of independent study. If you don't organise yourself properly you will be likely to be at risk of underperforming.

You will be required to keep your notes in a folder (A4, Lever arch etc.) and write your notes on lined, A4 paper. This allows you to add worksheets, PLC's, revision tasks, exam questions and topic tests, into each topic area (dividers are therefore a sensible way to help this).

Each lesson your notes should have the following as a minimum requirement:

• Date, Title of work, Lesson notes, Lesson activities, Self study/homework

Over the summer break please prepare your folder, placing the notes from each task into an introduction section.

Task 1: Motivation

Watch some of the videos from the above playlist and explore further videos and articles on environmental science. Write a short reflection (no more than 100 words) on what interests you about the subject, and where you would like it to take you. Keep hold of this, as it will eventually go in to you're A-Level study folder.

<u>Why study Environmental Science</u> <u>Death of Bees</u> <u>Best paid jobs in Environmental science</u>

Outcome: Written reflection to go in your study folder at the start of term

Task 2: Recap

Use the below links to review key topics from your combined science GCSE Biology – <u>Cycles</u>, <u>global warming</u>, <u>biodiversity</u> Chemistry – <u>Earth's Atmosphere</u>, <u>greenhouse effect</u>, <u>climate change</u>, <u>pollutants</u> Physics – <u>Renewable</u> and <u>non-renewable</u> energy resources

Outcome: Summary page for each subject listing key words, concepts, and diagrams that will be relevant to your up coming course. This will go into your study folder at the start of term

Task 3: Deeper learning

Choose one of the following online courses to complete across the summer. Once started each course should take only a few hours a week and are planned to be completed in 4 weeks (or less). All courses have a free option which is what I would like you to choose.

A Beginner's Guide to Environmental Science: Wicked Problems and Possible Solutions Renewable Energy: Achieving Sustainability through Bioenergy Causes of Climate Change Climate Change: Solutions Climate Change: The Science

Outcome: Keep any notes you take from completing reflections/exercises for your chosen course. These will go into your study folder at the start of term.