



Get off to a 'Flying Start' in

Environmental Science - A Level

Welcome to Flying Start with North Devon College.

We hope that you are excited to join us at North Devon College. We want to help you to focus on your skills for your course with us and so below you will find questions to consider, tasks to complete and some background research to undertake before enrolment.

Please read the instructions and have a go at the activities.

If you get stuck, please see the Frequently Asked Questions (FAQs) section at the end of this document for help.

A quick hello and introduction to the course [follow the link](#)

Welcome to Environmental Science!

During the two-year course you will develop an understanding of key scientific processes, interpret data and develop the ability to describe and explain relationships. Fieldtrips to Paignton Zoo and Lundy, plus beaches, rivers and forests will help consolidate what you learn in the classroom. Below, you will find four tasks which get you to: explore the specification; introduce you to content across Year 1 of the course; consider your carbon footprint and consider ways to be more sustainable.

Enjoy the tasks! Please do not worry about getting everything perfect. It is designed to spark your interest and give you a flavour of what Environmental Science is about. This includes the collection and analysis of data, which is used to apply changes to human behaviours that will help us develop sustainable lifestyles.

You can either download an electronic copy and type your answers or write your answers out by hand. Regardless of format, please bring your work to the first lesson in September.

We very much look forward to meeting you and starting the specification.

With very best wishes,

Liz

To get you started...

Task 1:

Go to the AQA A level Environmental Science (7447) webpage and open the specification document (specification for exams from 2018):

[AQA Environmental Science specification link](#)

Save this link to your favourites or download it to your personal computer in a new file called Environmental Science; you will be using it regularly via your course booklets.

Have a look through at the topics you will be studying.

Complete the following:

1. **Section 3.1.1.1** is where we start in September, what is it all about?
2. Find a section, within the specification, that interests you. **List** the section number and explain why you are looking forward to learning more.

Task 2:

Use your own knowledge and the internet to research and answer the **following questions about the whole course**. The aim is to find out if Environmental Science A Level is something you'll love.

1. What does 'life' require?
2. How many species are there on the planet and how do we know?
3. What is the current estimated rate of species extinction and why are they happening?
4. Why are some animals naturally rare?
5. How do we protect birds?
6. Why is rhino horn in demand?
7. What are the environmental impacts of the china clay industry in the southwest of England?
8. How much oxygen is in the atmosphere and where does it come from?
9. Name greenhouse gases other than CO₂.

10. How much freshwater is there in the world and where is it found?
11. What is the North Atlantic Conveyor (also known as AMOC) and why is it important?
12. How old is planet Earth? Write this number in standard form. How do we know the answer?
13. Eventually all rocks are weathered to sand, clay and solutions. Why are there still rocks on the planet?
14. River Thames Frost Fairs were held between the 15th and 19th centuries. Have we lost our celebratory spirit, or is there another reason they no longer exist?

Task 3: An analysis of my carbon footprint

Anthropogenic global warming is caused by an increase in greenhouse gases emitted from human activities such as, the combustion of fossil fuels and livestock production. To slow the rate of climate change and avoid catastrophic impacts to our planet, population and biodiversity we must make changes to the way we inhabit planet Earth. This is going to require huge changes to the way we currently produce food, provide and consume energy, and will require a re-working of our infra-structure and questioning our levels of consumption. Many governments are now making commitments to reduce greenhouse gas emissions on a national scale and public awareness is driving personal change on an individual basis.

1. The UK government has committed to reach Net-Zero by 2050. Find out what this means.

Your carbon footprint is a measure of greenhouse gases produced by the way you choose to live your life.

2. [Take the quiz.](#)

As you work through the questions, read the information on the right to learn about how each affects your emissions and answer the questions below

3. Explain how the choices you make about your diet affects your contribution to climate change

4. Explain how the choices you make about how you travel affects your contribution to climate change.
5. Explain how the way you manage you home affects your contribution to climate change.
6. Explain how the 'stuff' you spend money on affects your contribution to climate change.

Once you have completed the calculator you will reach a page that looks like this:



The UK must reduce its emissions if we are to meet our commitment of net zero emissions by 2050.

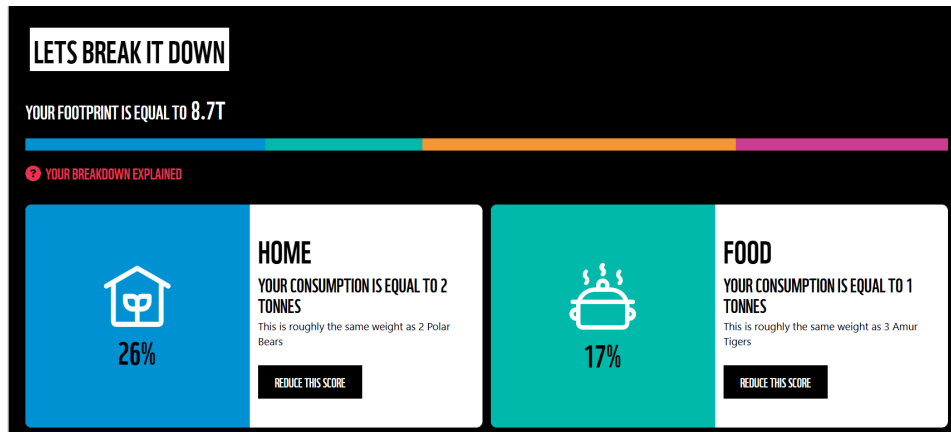
7. How did you do? Complete the table.

Who?	tonnes C yr ⁻¹
World average	
UK average	

You	
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8. Why do you think the world average is so much lower than yours?

SCROLL DOWN to see full results



9. Which areas of your life contribute the most to your carbon footprint? Click on each section to read more details and use the 3 tips to **complete the table below**



Area of your life	Your % contribution	3 tips to reducing your carbon emission
Food		
Travel		

Home		
Stuff		

Well done – please save this document somewhere safe and on your first day when you receive access to the college IT services, I will ask you to upload it onto your personal OneNote page. For now, save it somewhere very safe.

For those who want a bit more...

Task 4

Using the IUCN Red List webpage <https://www.iucnredlist.org/>, and search for the **Eastern Gorilla** (*Gorilla beringei* ssp. *Beringei*). Document a brief case study to include the following information (only brief – you do not need to copy out all the text, maybe add some nice photos):

- Common and Latin name
- Red list status
- Population
- Habitat and ecology
- Threats
- Conservation

Frequently Asked Questions (FAQs)

Q: Will this work be marked and when is it due?

A: This work may not be formally marked but will be discussed during your first classes with us in September. Just bring along what you have completed to your first timetabled sessions.

Q: I am not sure if I have the answers right, what should I do?

A: Don't worry, just have a go at getting something down and bring it along to the lesson where we can talk it through. There is no need to get anxious about the tasks, we are not expecting you to know everything before you arrive but are interested in your ideas and what you have found easy or difficult as it helps us support you right from the beginning.



Q: Do I have to do it?

A: Flying Start is not compulsory, but many students find it useful for getting them used to thinking about subjects at the next level. Early classroom sessions will also reflect on some of the Flying Start activities.