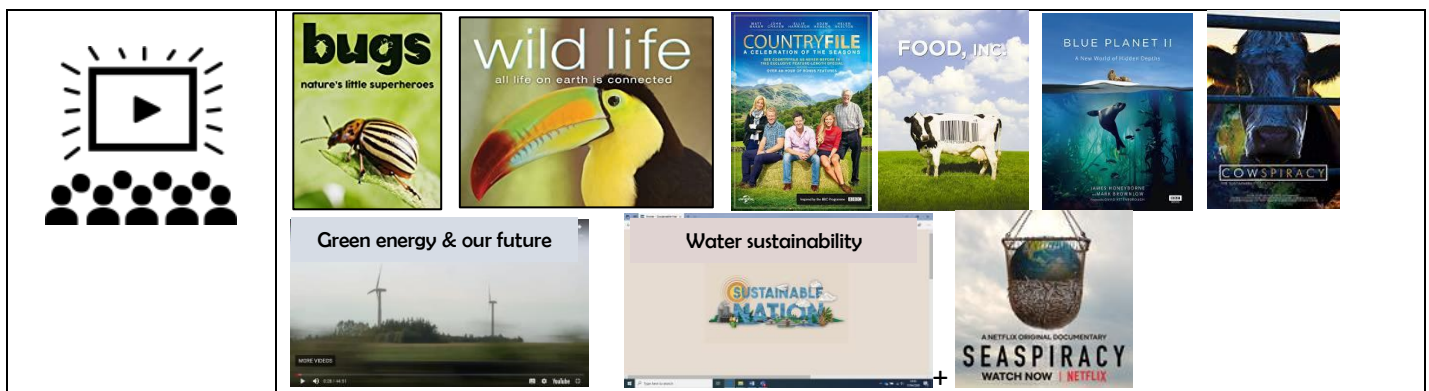




Environmental Science Hereford Sixth Form College

Welcome to **Environmental Science**. We would like to help you to prepare for your new A level course over the coming weeks and months. Below are some suggestions of books, news, films, podcasts, TV shows, citizen science activities and websites, which will keep you up to date with environmental knowledge and development.



	<p>Overheard - National Geographic Podcast Science weekly - The Guardian Podcast BBC Costing the Earth BBC the Documentary Podcast</p>	<p>The Living Planet Podcasts BBC 30 animals that have made us smarter BBC Science Hour BBC Putting science to work - Air Pollution</p>
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	<p>BBC Climate forcing BBC Climate Change BBC Science and Nature playlist BBC Sustainable Thinking Colchester Zoo Live at 11am and 1pm BBC Countryfile at 7pm on Sundays Any David Attenborough series</p>	<p>iPlayer Seven Worlds One Planet iPlayer dynasties iPlayer climate-change-the-facts</p>
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	<p>Citizen Science penguin-watch Citizen Science rainfall-rescue The Big Butterfly Count</p>	<p>https://earthchallenge2020.earthday.org/ Transcribing old climate data Air quality surveys</p>
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	<p>Bioethics Education project JNCC wwf CITES list of endangered species IUCN Red list of endangered species</p>	<p>Environment Agency air quality guide by region Living Planet Report</p>
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Pre-course work

Essential Science knowledge from GCSE for A level Environmental Science

You must understand the implications of basic science principles from your GCSE course

Biology

- Understand the processes of **photosynthesis** and **respiration** and their implications for life
- Be able to write word equations for photosynthesis and respiration

Chemistry

- Understand what an **element** is, and the properties of the most common elements found in biological compounds
- Be able to write a paragraph using all these words in correct context: - **solution, solute, solvent, dissolve, temperature, precipitate.** (Use NaCl as an example)

Physics

- Physical **properties of water**
- **Electromagnetic spectrum**, especially ultra violet, visible light and infra-red radiation
- 1st & 2nd laws of **thermodynamics**
- **Energy efficiency**

Geography (from Key Stage 3)

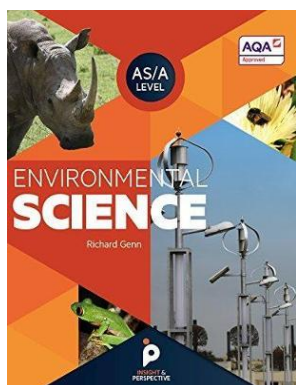
- The **water cycle**
- **Latitude** related to climate, latitudes of the **equator & the tropics**, latitudes of UK and Europe

Geology (covered in GCSE Science/ Chemistry)

- The three main **types of rock** and how they are formed

Mathematics

- Calculating %
- Calculating proportions (scaling down/up)
- Calculating mean



At A-level you will be following the [AQA Specification](#) and will study the following topics:

- The Living Environment
- The Physical Environment
- Energy and Pollution
- Biological Resources
- Sustainability
- Scientific Methods

The text book will be issued on loan to you from College, or can be purchased from the [publisher, Amazon](#) or sometimes eBay.

Publisher: Insight & Perspective
ISBN: 9781912190072

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Environmental Science A Level – Preparatory Work

1. I have attached 5 pages from the Environmental Science text book.

I would like you to read the pages and make notes with diagrams. You will be asked to do this as part of your homework / extra learning for Environmental science so it is good practice.

2. Watch the TED talk.

<https://www.youtube.com/watch?v=N-yALPEpV4w>

We will be asking you questions in the first lesson about it.