



## Year 10 Science Reading texts that pupils will study during **Learning Programme 3** the learning programme wk. 1: Wk. 3: Wk. 5: he values we are learning about are respect and justice Respect - a feeling of deep admiration for someone or something elicited by their abilities, qualities or achievements What will I be learning about in this Learning Programme? This LP is a major part of Synergy GCSE, so following this LP closely is imperative. Lifestyle and Health and preventing, treating and curing disease forms a large part of the interactions with the environment unit, so a good understanding of the topic is important. Where have I seen this learning before? This LP develops knowledge of how the environment can influence our health. This builds on knowledge gained in Year 8 What could I use it for? Those wishing to go on and study science beyond GCSE will greatly benefit from this LP, careers working in healthcare, medicine and energy industries are just some of the roles which use this learning. Behaviour to support the values: In LP3.1, I will know: 06/01/2025 - (WK 2) Homework what health is: Homework tasks are located in the Knowledge what is meant by communicable disease; I will show respect by actively listening to Organisers how smoking affects the risk of developing cardiovascular disease others Behaviour to support the values: STEPS/SLANT the effect of diet and exercise on the development of obesity; Homework tasks are located in the Knowledge how leaky heart valves can be replaced; I will show justice by speaking up when Organisers some of the risks and benefits of heart transplants. somethingisnotright Behaviour to support the values: In LP3.3. I will know: 20/01/2025 - (WK 2) STEPS/SLANT why it is important to control your internal environment; Homework tasks are located in the Knowledge the role of the pancreas in monitoring and controlling blood glucose concentration; I will show respect by being punctual and not Organisers the differences between how Type 1 and Type 2 diabetes are treated wasting the time of others Extended Task Behaviour to support the values: n LP3.4. I will know: 27/01/2025 - (WK 1) STEPS/SLANT the roles of hormones in human reproduction; I will show justice by being inclusive and Homework tasks are located in the Knowledge how atoms can gain energy; accepting everyone regardless of our Organisers what a radioactive substance is differences Behaviour to support the values: In LP3.5, I will know: 03/02/2025 - (WK 2) STEPS/SLANT what is meant by the half-life of a radioactive source; Homework tasks are located in the Knowledge how far each type of radiation can travel in air; I will show respect by taking care of the Organisers what is made by irradiation and contamination school property Behaviour to support the values: In LP3.6, I will know: 10/02/2025 - (WK 1) Homework STEPS/SLANT what pathogens are; how the spread of disease can be reduced or prevented; Homework tasks are located in the Knowledge some examples of diseases caused by viruses including measles and HIV/AIDS in human. Organisers I will show justice by supporting others of seekinghelp when required Extended Task Behaviour to support the values: 24/02/2025 - (WK 2) STEPS/SLANT review my learning, recalling and applying key knowledge, focus on closing any gaps in my Homework tasks are located in the Knowledge I will show respect by actively listening to knowledge and prepare effectively for the upcoming assessments. others Behaviour to support the values: In LP3.7, I will know: 03/03/2025 - (WK 1) STEPS/SLANT how to state how your body stops pathogens getting in; I will show respect by recognising and Homework tasks are located in the Knowledge how to explain how vaccination works; celebrating the achievements of myself and Organisers how to explain what medicines are and how some of them work. others



## Resources to support learning

Kerboodle, Bitesize, GCSEPod

## FFET Award Challenge for this Learning Prog

Year 10 Challenge: Radioactivity

Challenge Title: "The Radioactive Hero!"

Radioactivity has always been portrayed as dangerous, but could it also create a hero? Design a comic book character who gains extraordinary powers from radioactivity.

Task:

Create a hero with powers inspired by real-life properties of radioactivity, such as alpha particles, gamma rays, or radioactive isotopes.

What to Create

A comic strip (3–6 panels) showcasing your hero in action.

A backstory (200–300 words) explaining how they gained their powers and their mission

Judging Criteria:

Creativity of the character, scientific connections to radioactivity, and the quality of the comic/storytelling