**Walton High School Hub Curriculum** 

**Year 9 - Science Half term 5 (April 2025 – May 2025)**

How it works:

1. In the table, find the correct week by looking at the date in the first column.
2. Find today’s work – there are three links per double lesson so you won’t run out of work!
3. Choose a lesson – hold ctrl and click on the chosen link.

**If the link does not work, you do not recognise the work or the work is too difficult, try another lesson.**

1. Some lessons have links to PowerPoints and other resources beneath the video and/or Starter Quiz.
2. Complete any starter quizzes.
	1. Write your answer down
	2. Mark your answers and write down any corrections, using the videos.
3. Watch the videos and take notes.
4. Pause if/when instructed to do so to answer questions or respond.
5. When the lesson is complete, go onto the next one.

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| Week commencing | Day | Subject/Topic | Lesson 1 | Lesson 2 |
| 28/04/25 | Monday | **Biology** – The Circulatory System | [The human circulatory system |](https://www.thenational.academy/pupils/programmes/biology-secondary-year-10-higher-aqa/units/transport-and-exchange-surfaces-in-humans/lessons/the-human-circulatory-system/overview)  | [The human heart and double circulatory system |](https://www.thenational.academy/pupils/programmes/biology-secondary-year-10-higher-aqa/units/transport-and-exchange-surfaces-in-humans/lessons/the-human-heart-and-double-circulatory-system/overview)  |
| Tuesday | [Human blood cells and blood vessels |](https://www.thenational.academy/pupils/programmes/biology-secondary-year-10-higher-aqa/units/transport-and-exchange-surfaces-in-humans/lessons/human-blood-cells-and-blood-vessels/overview)  | [Microscopy of human blood cells and blood vessels |](https://www.thenational.academy/pupils/programmes/biology-secondary-year-10-higher-aqa/units/transport-and-exchange-surfaces-in-humans/lessons/microscopy-of-human-blood-cells-and-blood-vessels/overview)  |
| Wednesday | [Moving into and out of the blood: diffusion, osmosis and active transport |](https://www.thenational.academy/pupils/programmes/biology-secondary-year-10-higher-aqa/units/transport-and-exchange-surfaces-in-humans/lessons/moving-into-and-out-of-the-blood-diffusion-osmosis-and-active-transport/overview)  | [Diffusion and surface area to volume ratio |](https://www.thenational.academy/pupils/programmes/biology-secondary-year-10-higher-aqa/units/transport-and-exchange-surfaces-in-humans/lessons/diffusion-and-surface-area-to-volume-ratio/overview)  |
| Thursday  | [The importance of exchange surfaces and transport systems in humans |](https://www.thenational.academy/pupils/programmes/biology-secondary-year-10-higher-aqa/units/transport-and-exchange-surfaces-in-humans/lessons/the-importance-of-exchange-surfaces-and-transport-systems-in-humans/overview)  | [Circulatory System 1 - Heart Lesson |](https://cognitoedu.org/coursesubtopic/b2-gcse-aqa-h-t_4.01)  |
| Friday | [Circulatory System 2 - Blood Vessels Lesson |](https://cognitoedu.org/coursesubtopic/b2-gcse-aqa-h-t_4.02)  | [Circulatory System 3 - Blood Lesson |](https://cognitoedu.org/coursesubtopic/b2-gcse-aqa-h-t_4.03)  |
| 05/05/25 | Monday  |  |  |  |
| Tuesday  | **Chemistry** – Carbon Chemistry | [Hydrocarbons Lesson |](https://cognitoedu.org/coursesubtopic/c2-gcse-aqa-h-t_7.04)  | [Alkanes - Properties & Combustion Lesson |](https://cognitoedu.org/coursesubtopic/c2-gcse-aqa-h-t_7.05)  |
| Wednesday  | [Fractional Distillation Lesson |](https://cognitoedu.org/coursesubtopic/c2-gcse-aqa-h-t_7.06)  | [Cracking & Alkenes Lesson |](https://cognitoedu.org/coursesubtopic/c2-gcse-aqa-h-t_7.07)  |
| Thursday  | [Addition Polymers Lesson |](https://cognitoedu.org/coursesubtopic/c2-gcse-aqa-h-t_7.1)  | [Reaction of Alkenes Lesson |](https://cognitoedu.org/coursesubtopic/c2-gcse-aqa-h-t_7.09)  |
| Friday | [Carbon Footprints Lesson |](https://cognitoedu.org/coursesubtopic/c2-gcse-aqa-h-t_9.03)  | [Air Pollution Lesson |](https://cognitoedu.org/coursesubtopic/c2-gcse-aqa-h-t_9.04)  |
| 12/05/25 | Monday | **Physics** – Light waves | [How light travels |](https://www.thenational.academy/pupils/programmes/science-primary-year-6/units/light-and-how-it-travels/lessons/how-light-travels/overview)  | [Reflection of light (including specular and diffuse) |](https://www.thenational.academy/pupils/programmes/physics-secondary-year-11-foundation-aqa/units/electromagnetic-waves/lessons/reflection-of-light-including-specular-and-diffuse/overview)  |
| Tuesday | [Refraction through a rectangular block |](https://www.thenational.academy/pupils/programmes/physics-secondary-year-11-foundation-aqa/units/electromagnetic-waves/lessons/refraction-through-a-rectangular-block/overview)  | [Refraction through a semicircular block |](https://www.thenational.academy/pupils/programmes/physics-secondary-year-11-foundation-aqa/units/electromagnetic-waves/lessons/refraction-through-a-semicircular-block/overview)  |
| Wednesday | [Light and colour |](https://www.thenational.academy/pupils/programmes/physics-secondary-year-11-foundation-aqa/units/electromagnetic-waves/lessons/light-and-colour/overview)  | [Convex lenses (including magnification) |](https://www.thenational.academy/pupils/programmes/physics-secondary-year-11-foundation-aqa/units/electromagnetic-waves/lessons/convex-lenses-including-magnification/overview)  |
| Thursday | [Scale diagrams for convex lenses (including magnification) |](https://www.thenational.academy/pupils/programmes/physics-secondary-year-11-foundation-aqa/units/electromagnetic-waves/lessons/scale-diagrams-for-convex-lenses-including-magnification/overview) | [Virtual images from convex and concave lenses (including magnification) |](https://www.thenational.academy/pupils/programmes/physics-secondary-year-11-foundation-aqa/units/electromagnetic-waves/lessons/virtual-images-from-convex-and-concave-lenses-including-magnification/overview)  |
| Friday | [How to Draw Ray Diagrams Lesson |](https://cognitoedu.org/coursesubtopic/p2-gcse-aqa-h-t_4.12)  | [Visible Light & Colour Lesson |](https://cognitoedu.org/coursesubtopic/p2-gcse-aqa-h-t_4.13)  |
| 19/05/25 | Monday | **Retrieval Practice** | [Hydrocarbons Lesson |](https://cognitoedu.org/coursesubtopic/c2-gcse-aqa-h-t_7.04)  | [Alkanes - Properties & Combustion Lesson |](https://cognitoedu.org/coursesubtopic/c2-gcse-aqa-h-t_7.05)  |
| Tuesday | [Fractional Distillation Lesson |](https://cognitoedu.org/coursesubtopic/c2-gcse-aqa-h-t_7.06)  | [Cracking & Alkenes Lesson |](https://cognitoedu.org/coursesubtopic/c2-gcse-aqa-h-t_7.07)  |
| Wednesday | [The human circulatory system |](https://www.thenational.academy/pupils/programmes/biology-secondary-year-10-higher-aqa/units/transport-and-exchange-surfaces-in-humans/lessons/the-human-circulatory-system/overview)  | [The human heart and double circulatory system |](https://www.thenational.academy/pupils/programmes/biology-secondary-year-10-higher-aqa/units/transport-and-exchange-surfaces-in-humans/lessons/the-human-heart-and-double-circulatory-system/overview)  |
| Thursday | [Refraction through a rectangular block |](https://www.thenational.academy/pupils/programmes/physics-secondary-year-11-foundation-aqa/units/electromagnetic-waves/lessons/refraction-through-a-rectangular-block/overview)  | [Refraction through a semicircular block |](https://www.thenational.academy/pupils/programmes/physics-secondary-year-11-foundation-aqa/units/electromagnetic-waves/lessons/refraction-through-a-semicircular-block/overview)  |
| Friday | [Longitudinal & Transverse Waves Lesson |](https://cognitoedu.org/coursesubtopic/p2-gcse-aqa-h-c_4.01)  | [Reflection Lesson |](https://cognitoedu.org/coursesubtopic/p2-gcse-aqa-h-c_4.03) |