**Walton High School Hub Curriculum** 

**Year 8 – Science Half term 1 (September 2025 – October 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 |
| 01/09/25 | Monday |  |  |  |
| Tuesday | **Biology** – Year 7 Recap | [The common processes of all living organisms |](https://www.thenational.academy/pupils/programmes/science-secondary-year-7/units/cells/lessons/the-common-processes-of-all-living-organisms/overview) | [Observing cells with a light microscope |](https://www.thenational.academy/pupils/programmes/science-secondary-year-7/units/cells/lessons/observing-cells-with-a-light-microscope/overview) |
| Wednesday | [Preparing and observing a microscope slide |](https://www.thenational.academy/pupils/programmes/science-secondary-year-7/units/cells/lessons/preparing-and-observing-a-microscope-slide/overview) | [Animal cell structures and their functions |](https://www.thenational.academy/pupils/programmes/science-secondary-year-7/units/cells/lessons/animal-cell-structures-and-their-functions/overview) |
| Thursday | [Plant cell structures and their functions |](https://www.thenational.academy/pupils/programmes/science-secondary-year-7/units/cells/lessons/plant-cell-structures-and-their-functions/overview) | [Multicellular and unicellular organisms |](https://www.thenational.academy/pupils/programmes/science-secondary-year-7/units/cells/lessons/multicellular-and-unicellular-organisms/overview) |
| Friday | [Specialised cells are adapted for their functions |](https://www.thenational.academy/pupils/programmes/science-secondary-year-7/units/cells/lessons/specialised-cells-are-adapted-for-their-functions/overview) | [Cell structures |](https://www.thenational.academy/pupils/programmes/science-secondary-year-7-l/units/cells-u2b1h4c/lessons/cell-structures-fxjz0y/overview) |
| 08/09/25 | Monday | **Chemistry** – Year 7 Recap | [Solid and liquid states |](https://www.thenational.academy/pupils/programmes/science-secondary-year-7/units/solid-liquid-gas-states-and-changes-of-state/lessons/solid-and-liquid-states/overview) | [Melting: particle model |](https://www.thenational.academy/pupils/programmes/science-secondary-year-7/units/solid-liquid-gas-states-and-changes-of-state/lessons/melting-particle-model/overview) |
| Tuesday | [Bunsen burners |](https://www.thenational.academy/pupils/programmes/science-secondary-year-7/units/solid-liquid-gas-states-and-changes-of-state/lessons/bunsen-burners/overview) | [Melting: melting points and freezing points |](https://www.thenational.academy/pupils/programmes/science-secondary-year-7/units/solid-liquid-gas-states-and-changes-of-state/lessons/melting-melting-points-and-freezing-points/overview) |
| Wednesday | [Particle model of substances in the gas state |](https://www.thenational.academy/pupils/programmes/science-secondary-year-7/units/solid-liquid-gas-states-and-changes-of-state/lessons/particle-model-of-substances-in-the-gas-state/overview) | [Boiling and condensing |](https://www.thenational.academy/pupils/programmes/science-secondary-year-7/units/solid-liquid-gas-states-and-changes-of-state/lessons/boiling-and-condensing/overview) |
| Thursday | [Changes of state: energy and evaporation |](https://www.thenational.academy/pupils/programmes/science-secondary-year-7/units/solid-liquid-gas-states-and-changes-of-state/lessons/changes-of-state-energy-and-evaporation/overview) | [Naming compounds |](https://www.thenational.academy/pupils/programmes/science-secondary-year-7/units/atoms-elements-and-compounds/lessons/naming-compounds/overview) |
| Friday | [Atoms and elements |](https://www.thenational.academy/pupils/programmes/science-secondary-year-7/units/atoms-elements-and-compounds/lessons/atoms-and-elements/overview) | [Properties of elements |](https://www.thenational.academy/pupils/programmes/science-secondary-year-7/units/atoms-elements-and-compounds/lessons/properties-of-elements/overview) |
| 15/09/25 | Monday | **Physics** – Year 7 Recap | [Energy stores and transfers |](https://www.thenational.academy/pupils/programmes/science-secondary-year-7-l/units/energy-2ga1p6y/lessons/energy-stores-and-transfers-q4rg3i/overview) | [Conservation of Energy and Efficiency |](https://www.thenational.academy/pupils/programmes/science-secondary-year-7-l/units/energy-2ga1p6y/lessons/conservation-of-energy-and-efficiency-7d68ho/overview) |
| Tuesday | [Conduction |](https://www.thenational.academy/pupils/programmes/science-secondary-year-7-l/units/energy-2ga1p6y/lessons/conduction-0yz3wp/overview) | [Convection |](https://www.thenational.academy/pupils/programmes/science-secondary-year-7-l/units/energy-2ga1p6y/lessons/convection-6acbiv/overview) |
| Wednesday | [Radiation |](https://www.thenational.academy/pupils/programmes/science-secondary-year-7-l/units/energy-2ga1p6y/lessons/radiation-d7lcc2/overview) | [Insulation |](https://www.thenational.academy/pupils/programmes/science-secondary-year-7-l/units/energy-2ga1p6y/lessons/insulation-n8r8ye/overview) |
| Thursday | [Power and energy |](https://www.thenational.academy/pupils/programmes/science-secondary-year-7-l/units/energy-2ga1p6y/lessons/power-and-energy-o9ueal/overview) | [Energy in the home |](https://www.thenational.academy/pupils/programmes/science-secondary-year-7-l/units/energy-2ga1p6y/lessons/energy-in-the-home-dabp49/overview) |
| Friday | [What forces do |](https://www.thenational.academy/pupils/programmes/science-secondary-year-7/units/forces/lessons/what-forces-do/overview) | [The different kinds of force |](https://www.thenational.academy/pupils/programmes/science-secondary-year-7/units/forces/lessons/the-different-kinds-of-force/overview) |
| 22/09/25 | Monday | **Biology** – Respiration and Exercise | [Breathing, respiration and gas exchange |](https://www.thenational.academy/pupils/programmes/science-secondary-year-8/units/breathing-and-respiration/lessons/breathing-respiration-and-gas-exchange/overview) | [The human gas exchange system and breathing |](https://www.thenational.academy/pupils/programmes/science-secondary-year-8/units/breathing-and-respiration/lessons/the-human-gas-exchange-system-and-breathing/overview) |
| Tuesday | [Estimating lung volume |](https://www.thenational.academy/pupils/programmes/science-secondary-year-8/units/breathing-and-respiration/lessons/estimating-lung-volume/overview) | [Adaptations of the human lungs for gas exchange |](https://www.thenational.academy/pupils/programmes/science-secondary-year-8/units/breathing-and-respiration/lessons/adaptations-of-the-human-lungs-for-gas-exchange/overview) |
| Wednesday | [Cellular respiration](https://www.thenational.academy/pupils/programmes/science-secondary-year-8/units/breathing-and-respiration/lessons/cellular-respiration/overview) | [Aerobic cellular respiration |](https://www.thenational.academy/pupils/programmes/science-secondary-year-8/units/breathing-and-respiration/lessons/aerobic-cellular-respiration/overview) |
| Thursday | [Anaerobic cellular respiration in humans |](https://www.thenational.academy/pupils/programmes/science-secondary-year-8/units/breathing-and-respiration/lessons/anaerobic-cellular-respiration-in-humans/overview) | [Anaerobic cellular respiration and fermentation in microorganisms |](https://www.thenational.academy/pupils/programmes/science-secondary-year-8/units/breathing-and-respiration/lessons/anaerobic-cellular-respiration-and-fermentation-in-microorganisms/overview) |
| Friday | [Greenshaw Learning Trust - Remote Learning](https://www.greenshawlearningtrust.co.uk/virtual-curriculum?group=189&lesson=3079) | [Greenshaw Learning Trust - Remote Learning](https://www.greenshawlearningtrust.co.uk/virtual-curriculum?group=189&lesson=3879) |
| 29/09/25 | Monday | **Chemistry** – The Periodic Table | [Metallic elements |](https://www.thenational.academy/pupils/programmes/science-secondary-year-7/units/atoms-elements-and-compounds/lessons/metallic-elements/overview) | [Molecular elements |](https://www.thenational.academy/pupils/programmes/science-secondary-year-7/units/atoms-elements-and-compounds/lessons/molecular-elements/overview) |
| Tuesday | [Common elements |](https://www.thenational.academy/pupils/programmes/science-secondary-year-7/units/atoms-elements-and-compounds/lessons/common-elements/overview) | [Compounds and their formation |](https://www.thenational.academy/pupils/programmes/science-secondary-year-7/units/atoms-elements-and-compounds/lessons/compounds-and-their-formation/overview) |
| Wednesday | [Chemical formulae |](https://www.thenational.academy/pupils/programmes/science-secondary-year-7/units/atoms-elements-and-compounds/lessons/chemical-formulae/overview) | [Naming compounds |](https://www.thenational.academy/pupils/programmes/science-secondary-year-7/units/atoms-elements-and-compounds/lessons/naming-compounds/overview) |
| Thursday | [A particle model of chemical reactions |](https://www.thenational.academy/pupils/programmes/science-secondary-year-7/units/atoms-elements-and-compounds/lessons/a-particle-model-of-chemical-reactions/overview) | [Elements |](https://www.thenational.academy/pupils/programmes/science-secondary-year-7-l/units/atoms-and-the-periodic-table-9q9t0p6/lessons/elements-4rclyu/overview) |
| Friday | [Compounds |](https://www.thenational.academy/pupils/programmes/science-secondary-year-7-l/units/atoms-and-the-periodic-table-9q9t0p6/lessons/compounds-gb87ga/overview) | [Chemical reactions |](https://www.thenational.academy/pupils/programmes/science-secondary-year-7-l/units/atoms-and-the-periodic-table-9q9t0p6/lessons/chemical-reactions-p26zu7/overview) |
| 06/10/25 | Monday | **Biology** – Plants and Disease | [Plant nutrition |](https://www.thenational.academy/pupils/programmes/science-secondary-year-9/units/plant-nutrition-and-photosynthesis/lessons/plant-nutrition/overview) | [Photosynthesis |](https://www.thenational.academy/pupils/programmes/science-secondary-year-9/units/plant-nutrition-and-photosynthesis/lessons/photosynthesis/overview) |
| Tuesday | [Adaptations of plants for photosynthesis: absorbing light |](https://www.thenational.academy/pupils/programmes/science-secondary-year-9/units/plant-nutrition-and-photosynthesis/lessons/adaptations-of-plants-for-photosynthesis-absorbing-light/overview) | [Adaptations of plants for photosynthesis: gas exchange and stomata |](https://www.thenational.academy/pupils/programmes/science-secondary-year-9/units/plant-nutrition-and-photosynthesis/lessons/adaptations-of-plants-for-photosynthesis-gas-exchange-and-stomata/overview) |
| Wednesday | [Flower structure |](https://www.thenational.academy/pupils/programmes/science-secondary-year-9/units/reproduction-in-plants/lessons/flower-structure/overview) | [Pollination and fertilisation |](https://www.thenational.academy/pupils/programmes/science-secondary-year-9/units/reproduction-in-plants/lessons/pollination-and-fertilisation/overview) |
| Thursday | [Insects and food security |](https://www.thenational.academy/pupils/programmes/science-secondary-year-9/units/reproduction-in-plants/lessons/insects-and-food-security/overview) | [Fruit and seeds |](https://www.thenational.academy/pupils/programmes/science-secondary-year-9/units/reproduction-in-plants/lessons/fruit-and-seeds/overview) |
| Friday | [Factors affecting seed germination: practical |](https://www.thenational.academy/pupils/programmes/science-secondary-year-9/units/reproduction-in-plants/lessons/factors-affecting-seed-germination-practical/overview) | [Factors affecting seed germination: data analysis |](https://www.thenational.academy/pupils/programmes/science-secondary-year-9/units/reproduction-in-plants/lessons/factors-affecting-seed-germination-data-analysis/overview) |
| 13/10/25 | Monday | **Chemistry** – Chemical and Physical Reactions | [Conservation of mass |](https://www.thenational.academy/pupils/programmes/science-secondary-year-7-l/units/atoms-and-the-periodic-table-9q9t0p6/lessons/conservation-of-mass-xs2ddb/overview) | [Development of the Periodic Table |](https://www.thenational.academy/pupils/programmes/science-secondary-year-7-l/units/atoms-and-the-periodic-table-9q9t0p6/lessons/development-of-the-periodic-table-r21gyc/overview) |
| Tuesday | [Metals and non-metals |](https://www.thenational.academy/pupils/programmes/science-secondary-year-7-l/units/atoms-and-the-periodic-table-9q9t0p6/lessons/metals-and-non-metals-2t0ylw/overview) | [Group 1 |](https://www.thenational.academy/pupils/programmes/science-secondary-year-7-l/units/atoms-and-the-periodic-table-9q9t0p6/lessons/group-1-7sf5im/overview) |
| Wednesday | [Group 0 (Noble Gases) |](https://www.thenational.academy/pupils/programmes/science-secondary-year-9/units/patterns-in-the-periodic-table/lessons/group-0-noble-gases/overview) | [Groups of elements in the periodic table |](https://www.thenational.academy/pupils/programmes/science-secondary-year-9/units/patterns-in-the-periodic-table/lessons/groups-of-elements-in-the-periodic-table/overview) |
| Thursday | [Group 1 and 2 metals |](https://www.thenational.academy/pupils/programmes/science-secondary-year-9/units/patterns-in-the-periodic-table/lessons/group-1-and-2-metals/overview) | [Group 7 (halogens) |](https://www.thenational.academy/pupils/programmes/science-secondary-year-9/units/patterns-in-the-periodic-table/lessons/group-7-halogens/overview) |
| Friday |  |  |  |
| 20/10/25 | Monday | **Biology** - DNA | [Heredity |](https://www.thenational.academy/pupils/programmes/science-secondary-year-7/units/heredity-and-dna/lessons/heredity/overview) | [Heredity and genetic material |](https://www.thenational.academy/pupils/programmes/science-secondary-year-7/units/heredity-and-dna/lessons/heredity-and-genetic-material/overview) |
| Tuesday | [Genetic material and DNA |](https://www.thenational.academy/pupils/programmes/science-secondary-year-7/units/heredity-and-dna/lessons/genetic-material-and-dna/overview) | [A model of the structure of DNA |](https://www.thenational.academy/pupils/programmes/science-secondary-year-7/units/heredity-and-dna/lessons/a-model-of-the-structure-of-dna/overview) |
| Wednesday | [DNA from fruit |](https://www.thenational.academy/pupils/programmes/science-secondary-year-7/units/heredity-and-dna/lessons/dna-from-fruit/overview) | [The discovery of the structure of DNA |](https://www.thenational.academy/pupils/programmes/science-secondary-year-7/units/heredity-and-dna/lessons/the-discovery-of-the-structure-of-dna/overview) |
| Thursday | [DNA, chromosomes, genes and the genome |](https://www.thenational.academy/pupils/programmes/science-secondary-year-7/units/heredity-and-dna/lessons/dna-chromosomes-genes-and-the-genome/overview) | [Greenshaw Learning Trust - Remote Learning](https://www.greenshawlearningtrust.co.uk/virtual-curriculum?group=189&lesson=2505) |
| Friday | [Greenshaw Learning Trust - Remote Learning](https://www.greenshawlearningtrust.co.uk/virtual-curriculum?group=189&lesson=2507) | [Greenshaw Learning Trust - Remote Learning](https://www.greenshawlearningtrust.co.uk/virtual-curriculum?group=189&lesson=2511) |