**Walton High School Hub Curriculum** 

**Year 9 - 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** - Cells | [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) | [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) |
| 08/09/25 | Monday | **Chemistry** – Atoms, Elements and Compounds | [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) |
| Tuesday | [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) |
| Wednesday | [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) |
| Thursday | [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) |
| Friday | [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) |
| 15/09/25 | Monday | **Physics** - Forces | [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) |
| Tuesday | [Measuring forces |](https://www.thenational.academy/pupils/programmes/science-secondary-year-7/units/forces/lessons/measuring-forces/overview) | [Using force arrows |](https://www.thenational.academy/pupils/programmes/science-secondary-year-7/units/forces/lessons/using-force-arrows/overview) |
| Wednesday | [Balanced and unbalanced forces |](https://www.thenational.academy/pupils/programmes/science-secondary-year-7/units/forces/lessons/balanced-and-unbalanced-forces/overview) | [Friction |](https://www.thenational.academy/pupils/programmes/science-secondary-year-7/units/forces/lessons/friction/overview) |
| Thursday | [Reducing friction: practical |](https://www.thenational.academy/pupils/programmes/science-secondary-year-7/units/forces/lessons/reducing-friction-practical/overview) | [Reducing friction: analysis |](https://www.thenational.academy/pupils/programmes/science-secondary-year-7/units/forces/lessons/reducing-friction-analysis/overview) |
| Friday | [Gravitational force and weight |](https://www.thenational.academy/pupils/programmes/science-secondary-year-9/units/hidden-forces/lessons/gravitational-force-and-weight/overview) | [Stretching springs |](https://www.thenational.academy/pupils/programmes/science-secondary-year-9/units/hidden-forces/lessons/stretching-springs/overview) |
| 22/09/25 | Monday | **Biology** - Microscopes | [Microscopes |](https://www.thenational.academy/pupils/programmes/science-secondary-year-8-l/units/cells-u2b1h4c/lessons/microscopes-lcj273/overview) | [Cell structures |](https://www.thenational.academy/pupils/programmes/science-secondary-year-8-l/units/cells-u2b1h4c/lessons/cell-structures-fxjz0y/overview) |
| Tuesday | [Specialised animal cells |](https://www.thenational.academy/pupils/programmes/science-secondary-year-8-l/units/cells-u2b1h4c/lessons/specialised-animal-cells-i2445v/overview) | [Specialised plant cells |](https://www.thenational.academy/pupils/programmes/science-secondary-year-8-l/units/cells-u2b1h4c/lessons/specialised-plant-cells-9czebu/overview) |
| Wednesday | [Cells |](https://www.thenational.academy/pupils/programmes/biology-secondary-year-10-higher-aqa/units/eukaryotic-and-prokaryotic-cells/lessons/cells/overview) | [Light microscopy: observing and drawing cells |](https://www.thenational.academy/pupils/programmes/biology-secondary-year-10-higher-aqa/units/eukaryotic-and-prokaryotic-cells/lessons/light-microscopy-observing-and-drawing-cells/overview) |
| Thursday | [Animal cells: common structures and specialised cells |](https://www.thenational.academy/pupils/programmes/biology-secondary-year-10-higher-aqa/units/eukaryotic-and-prokaryotic-cells/lessons/animal-cells-common-structures-and-specialised-cells/overview) | [Plant cells: common structures and specialised cells |](https://www.thenational.academy/pupils/programmes/biology-secondary-year-10-higher-aqa/units/eukaryotic-and-prokaryotic-cells/lessons/plant-cells-common-structures-and-specialised-cells/overview) |
| Friday | [Eukaryotic and prokaryotic organisms |](https://www.thenational.academy/pupils/programmes/biology-secondary-year-10-higher-aqa/units/eukaryotic-and-prokaryotic-cells/lessons/eukaryotic-and-prokaryotic-organisms/overview) | [Common structures of prokaryotic cells |](https://www.thenational.academy/pupils/programmes/biology-secondary-year-10-higher-aqa/units/eukaryotic-and-prokaryotic-cells/lessons/common-structures-of-prokaryotic-cells/overview) |
| 29/09/25 | Monday | **Chemistry** – The Periodic Table | [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) |
| Tuesday | [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) |
| Wednesday | [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 | O](https://www.thenational.academy/pupils/programmes/science-secondary-year-7-l/units/atoms-and-the-periodic-table-9q9t0p6/lessons/group-1-7sf5im/overview) |
| Thursday | [Group 7 |](https://www.thenational.academy/pupils/programmes/science-secondary-year-7-l/units/atoms-and-the-periodic-table-9q9t0p6/lessons/group-7-lfrpjz/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) |
| Friday | [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) |
| 06/10/25 | Monday | **Physics** - Forces | [Hooke's law |](https://www.thenational.academy/pupils/programmes/science-secondary-year-9/units/hidden-forces/lessons/hookes-law/overview) | [Stretching rubber |](https://www.thenational.academy/pupils/programmes/science-secondary-year-9/units/hidden-forces/lessons/stretching-rubber/overview) |
| Tuesday | [The force of a floor |](https://www.thenational.academy/pupils/programmes/science-secondary-year-9/units/hidden-forces/lessons/the-force-of-a-floor/overview) | [Levers |](https://www.thenational.academy/pupils/programmes/science-secondary-year-9/units/hidden-forces/lessons/levers/overview) |
| Wednesday | [Turning forces |](https://www.thenational.academy/pupils/programmes/science-secondary-year-9/units/hidden-forces/lessons/turning-forces/overview) | [Floating, mass and shape |](https://www.thenational.academy/pupils/programmes/science-secondary-year-9/units/hidden-forces/lessons/floating-mass-and-shape/overview) |
| Thursday | [Pressure |](https://www.thenational.academy/pupils/programmes/science-secondary-year-9/units/hidden-forces/lessons/pressure/overview) | [Pressure at different depths and heights |](https://www.thenational.academy/pupils/programmes/science-secondary-year-9/units/hidden-forces/lessons/pressure-at-different-depths-and-heights/overview) |
| Friday | [Contact and Non-Contact Forces Lesson |](https://cognitoedu.org/coursesubtopic/p2-gcse-aqa-h-t_2.01) | [Scalar and Vector Quantities Lesson |](https://cognitoedu.org/coursesubtopic/p2-gcse-aqa-h-t_2.02) |
| 13/10/25 | Monday | **Biology -** Microscopes | [The size and scale of cells: including standard form |](https://www.thenational.academy/pupils/programmes/biology-secondary-year-10-higher-aqa/units/eukaryotic-and-prokaryotic-cells/lessons/the-size-and-scale-of-cells-including-standard-form/overview) | [Cell Structure Lesson |](https://cognitoedu.org/coursesubtopic/b2-gcse-aqa-h-t_1.02) |
| Tuesday | [Microscopy - What it is Lesson |](https://cognitoedu.org/coursesubtopic/b2-gcse-aqa-h-t_1.04) | [Microscopy - Light & Electron Microscopes Lesson |](https://cognitoedu.org/coursesubtopic/b2-gcse-aqa-h-t_1.19) |
| Wednesday | [Kingdoms of Life Lesson |](https://cognitoedu.org/coursesubtopic/b2-gcse-aqa-h-t_1.01) | [Microscopy - Units of Conversion Lesson |](https://cognitoedu.org/coursesubtopic/b2-gcse-aqa-h-t_1.05) |
| Thursday | [Microscopy - Calculations Lesson |](https://cognitoedu.org/coursesubtopic/b2-gcse-aqa-h-t_1.06) | [Microscopy - Calculations Lesson |](https://cognitoedu.org/coursesubtopic/b2-gcse-aqa-h-t_1.06) |
| Friday |  |  |  |
| 20/10/25 | Monday | **Chemistry** – Atomic Structure | [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) | [Atomic structure (very small electron mass) |](https://www.thenational.academy/pupils/programmes/chemistry-secondary-year-10-foundation-aqa/units/atomic-structure-and-the-periodic-table/lessons/atomic-structure-very-small-electron-mass/overview) |
| Tuesday | [Developing a model for atoms |](https://www.thenational.academy/pupils/programmes/chemistry-secondary-year-10-foundation-aqa/units/atomic-structure-and-the-periodic-table/lessons/developing-a-model-for-atoms/overview) | [Atoms, elements and compounds |](https://www.thenational.academy/pupils/programmes/chemistry-secondary-year-10-foundation-aqa/units/atomic-structure-and-the-periodic-table/lessons/atoms-elements-and-compounds/overview) |
| Wednesday | [Modern periodic table and electron configuration |](https://www.thenational.academy/pupils/programmes/chemistry-secondary-year-10-foundation-aqa/units/atomic-structure-and-the-periodic-table/lessons/modern-periodic-table-and-electron-configuration/overview) | [Atomic number and mass number |](https://www.thenational.academy/pupils/programmes/chemistry-secondary-year-10-foundation-aqa/units/atomic-structure-and-the-periodic-table/lessons/atomic-number-and-mass-number/overview) |
| Thursday | [Isotopes and relative atomic mass |](https://www.thenational.academy/pupils/programmes/chemistry-secondary-year-10-foundation-aqa/units/atomic-structure-and-the-periodic-table/lessons/isotopes-and-relative-atomic-mass/overview) | [Relative formula mass |](https://www.thenational.academy/pupils/programmes/chemistry-secondary-year-10-foundation-aqa/units/atomic-structure-and-the-periodic-table/lessons/relative-formula-mass/overview) |
| Friday | [Development of the periodic table |](https://www.thenational.academy/pupils/programmes/chemistry-secondary-year-10-foundation-aqa/units/atomic-structure-and-the-periodic-table/lessons/development-of-the-periodic-table/overview) | [Tests for Gases Lesson |](https://cognitoedu.org/coursesubtopic/c2-gcse-aqa-h-t_8.03) |