**Walton High School Hub Curriculum** 

**Year 7 – 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 | **Chemistry** – States of Matter | [What is a variable? |](https://www.thenational.academy/pupils/programmes/science-primary-year-3-l/units/practical-skills-8859/lessons/what-is-a-variable-6mtk8c/overview)  | [How do you draw a scientific diagram? |](https://www.thenational.academy/pupils/programmes/science-primary-year-3-l/units/practical-skills-8859/lessons/how-do-you-draw-a-scientific-diagram-69hp6e/overview)  |
| Wednesday | [Why is a method important? |](https://www.thenational.academy/pupils/programmes/science-primary-year-3-l/units/practical-skills-8859/lessons/why-is-a-method-important-c5j3ge/overview)  | [What can we do with data we collect? |](https://www.thenational.academy/pupils/programmes/science-primary-year-3-l/units/practical-skills-8859/lessons/what-can-we-do-with-data-we-collect-6wtkat/overview)  |
| Thursday  | [How can we communicate our results? |](https://www.thenational.academy/pupils/programmes/science-primary-year-3-l/units/practical-skills-8859/lessons/how-can-we-communicate-our-results-cmt3ec/overview)  | [How can we record an entire investigation? |](https://www.thenational.academy/pupils/programmes/science-primary-year-3-l/units/practical-skills-8859/lessons/how-can-we-record-an-entire-investigation-6guk4d/overview)  |
| Friday | [How do particles in solids, liquids and gases behave? |](https://www.thenational.academy/pupils/programmes/science-primary-year-6-l/units/particles-in-physical-and-chemical-changes-dc49/lessons/how-do-particles-in-solids-liquids-and-gases-behave-cnj38t/overview)  | [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)  |
| 08/09/25 | Monday  | **Physics** – Energy Types and Transfers | [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 | [Heating and cooling |](https://www.thenational.academy/pupils/programmes/science-secondary-year-8/units/fuels-and-energetics/lessons/heating-and-cooling/overview)  | [Cooling curve: practical |](https://www.thenational.academy/pupils/programmes/science-secondary-year-8/units/fuels-and-energetics/lessons/cooling-curve-practical/overview)  |
| 15/09/25 | Monday | **Chemistry –** States of matter and transfers | [What are the properties of solids, liquids and gases? |](https://www.thenational.academy/pupils/programmes/science-primary-year-4-l/units/states-of-matter-3a2a/lessons/what-are-the-properties-of-solids-liquids-and-gases-6gv30d/overview)  | [How do particles behave inside solids, liquids and gases? |](https://www.thenational.academy/pupils/programmes/science-primary-year-4-l/units/states-of-matter-3a2a/lessons/how-do-particles-behave-inside-solids-liquids-and-gases-68wp2c/overview)  |
| Tuesday | [What happens when you heat or cool each state of matter? |](https://www.thenational.academy/pupils/programmes/science-primary-year-4-l/units/states-of-matter-3a2a/lessons/what-happens-when-you-heat-or-cool-each-state-of-matter-68w3at/overview)  | [What are changes of state and why do they take place? |](https://www.thenational.academy/pupils/programmes/science-primary-year-4-l/units/states-of-matter-3a2a/lessons/what-are-changes-of-state-and-why-do-they-take-place-cgt64r/overview)  |
| Wednesday | [What are melting points and boiling points? |](https://www.thenational.academy/pupils/programmes/science-primary-year-4-l/units/states-of-matter-3a2a/lessons/what-are-melting-points-and-boiling-points-6djp8r/overview)  | [Which substances do not fit into one state of matter? |](https://www.thenational.academy/pupils/programmes/science-primary-year-4-l/units/states-of-matter-3a2a/lessons/which-substances-do-not-fit-into-one-state-of-matter-c5hp4r/overview)  |
| Thursday | [What happens during a state change? |](https://www.thenational.academy/pupils/programmes/science-primary-year-5-l/units/physical-and-chemical-changes-a481/lessons/what-happens-during-a-state-change-c8wp6e/overview)  | [What is a physical change and how can we identify them? |](https://www.thenational.academy/pupils/programmes/science-primary-year-5-l/units/physical-and-chemical-changes-a481/lessons/what-is-a-physical-change-and-how-can-we-identify-them-6xgk8d/overview)  |
| Friday | [What is the difference between physical and chemical changes? |](https://www.thenational.academy/pupils/programmes/science-primary-year-5-l/units/physical-and-chemical-changes-a481/lessons/what-is-the-difference-between-physical-and-chemical-changes-64upcr/overview)  | [How do particles in solids, liquids and gases behave? |](https://www.thenational.academy/pupils/programmes/science-primary-year-6-l/units/particles-in-physical-and-chemical-changes-dc49/lessons/how-do-particles-in-solids-liquids-and-gases-behave-cnj38t/overview)  |
| 22/09/25 | Monday | **Physics** – Types of Energy (Renewable, Non-Renewable) | [Comparing fuels |](https://www.thenational.academy/pupils/programmes/science-secondary-year-8/units/fuels-and-energetics/lessons/comparing-fuels/overview)  | [Power stations |](https://www.thenational.academy/pupils/programmes/science-secondary-year-8/units/fuels-and-energetics/lessons/power-stations/overview)  |
| Tuesday | [Using renewable energy resources |](https://www.thenational.academy/pupils/programmes/science-secondary-year-8/units/fuels-and-energetics/lessons/using-renewable-energy-resources/overview) | [Greenshaw Learning Trust - Remote Learning](https://www.greenshawlearningtrust.co.uk/virtual-curriculum?group=189&lesson=4574) |
| Wednesday | [Greenshaw Learning Trust - Remote Learning](https://www.greenshawlearningtrust.co.uk/virtual-curriculum?group=189&lesson=4575) | [Greenshaw Learning Trust - Remote Learning](https://www.greenshawlearningtrust.co.uk/virtual-curriculum?group=189&lesson=4573) |
| Thursday | [Greenshaw Learning Trust - Remote Learning](https://www.greenshawlearningtrust.co.uk/virtual-curriculum?group=189&lesson=4572) | [Greenshaw Learning Trust - Remote Learning](https://www.greenshawlearningtrust.co.uk/virtual-curriculum?group=189&lesson=4571) |
| Friday | [Greenshaw Learning Trust - Remote Learning](https://www.greenshawlearningtrust.co.uk/virtual-curriculum?group=189&lesson=4570) | [Greenshaw Learning Trust - Remote Learning](https://www.greenshawlearningtrust.co.uk/virtual-curriculum?group=189&lesson=4569) |
| 29/09/25 | Monday  | **Chemistry** – Elements, Compounds and Mixtures | [What makes something pure? |](https://www.thenational.academy/pupils/programmes/science-primary-year-5-l/units/separating-mixtures-9713/lessons/what-makes-something-pure-crv3ge/overview)  | [What makes something a mixture? |](https://www.thenational.academy/pupils/programmes/science-primary-year-5-l/units/separating-mixtures-9713/lessons/what-makes-something-a-mixture-61j38e/overview)  |
| Tuesday | [What is a formulation? |](https://www.thenational.academy/pupils/programmes/science-primary-year-5-l/units/separating-mixtures-9713/lessons/what-is-a-formulation-74r32t/overview)  | [How can we separate mixtures into pure substances? |](https://www.thenational.academy/pupils/programmes/science-primary-year-5-l/units/separating-mixtures-9713/lessons/how-can-we-separate-mixtures-into-pure-substances-6hh3ce/overview)  |
| Wednesday | [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)  | [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 | [What is the difference between physical and chemical changes? |](https://www.thenational.academy/pupils/programmes/science-primary-year-5-l/units/physical-and-chemical-changes-a481/lessons/what-is-the-difference-between-physical-and-chemical-changes-64upcr/overview)  | [What is a chemical reaction and how can we identify them? |](https://www.thenational.academy/pupils/programmes/science-primary-year-5-l/units/physical-and-chemical-changes-a481/lessons/what-is-a-chemical-reaction-and-how-can-we-identify-them-c4t34d/overview)  |
| Friday | [What can we do to investigate chemical reactions? |](https://www.thenational.academy/pupils/programmes/science-primary-year-5-l/units/physical-and-chemical-changes-a481/lessons/what-can-we-do-to-investigate-chemical-reactions-70vk8d/overview)  | [What do particles in pure substances and mixtures look like? |](https://www.thenational.academy/pupils/programmes/science-primary-year-6-l/units/particles-in-physical-and-chemical-changes-dc49/lessons/what-do-particles-in-pure-substances-and-mixtures-look-like-6wup6c/overview)  |
| 06/10/25 | Monday | **Physics** – Energy Types and Transfers | [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 | [Heating and cooling |](https://www.thenational.academy/pupils/programmes/science-secondary-year-8/units/fuels-and-energetics/lessons/heating-and-cooling/overview)  | [Cooling curve: practical |](https://www.thenational.academy/pupils/programmes/science-secondary-year-8/units/fuels-and-energetics/lessons/cooling-curve-practical/overview)  |
| 13/10/25 | Monday | **Chemistry** – particle models | [What happens to particles during dissolving? |](https://www.thenational.academy/pupils/programmes/science-primary-year-6-l/units/particles-in-physical-and-chemical-changes-dc49/lessons/what-happens-to-particles-during-dissolving-74t36c/overview)  | [How can mixtures be separated? |](https://www.thenational.academy/pupils/programmes/science-primary-year-6-l/units/particles-in-physical-and-chemical-changes-dc49/lessons/how-can-mixtures-be-separated-70tkjc/overview)  |
| Tuesday | [How can we tell a chemical reaction has taken place? |](https://www.thenational.academy/pupils/programmes/science-primary-year-6-l/units/particles-in-physical-and-chemical-changes-dc49/lessons/how-can-we-tell-a-chemical-reaction-has-taken-place-chjp8e/overview)  | [What happens to particles during burning? |](https://www.thenational.academy/pupils/programmes/science-primary-year-6-l/units/particles-in-physical-and-chemical-changes-dc49/lessons/what-happens-to-particles-during-burning-cctp2d/overview)  |
| Wednesday | [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)  |
| Thursday | [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)  | [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)  |
| Friday |  |  |  |
| 20/10/25 | Monday | **Physics** – Energy resources | [Comparing fuels |](https://www.thenational.academy/pupils/programmes/science-secondary-year-8/units/fuels-and-energetics/lessons/comparing-fuels/overview)  | [Power stations |](https://www.thenational.academy/pupils/programmes/science-secondary-year-8/units/fuels-and-energetics/lessons/power-stations/overview)  |
| Tuesday | [Using renewable energy resources |](https://www.thenational.academy/pupils/programmes/science-secondary-year-8/units/fuels-and-energetics/lessons/using-renewable-energy-resources/overview) | [Greenshaw Learning Trust - Remote Learning](https://www.greenshawlearningtrust.co.uk/virtual-curriculum?group=189&lesson=4574) |
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| Thursday | [Greenshaw Learning Trust - Remote Learning](https://www.greenshawlearningtrust.co.uk/virtual-curriculum?group=189&lesson=4572) | [Greenshaw Learning Trust - Remote Learning](https://www.greenshawlearningtrust.co.uk/virtual-curriculum?group=189&lesson=4571) |
| Friday | [Greenshaw Learning Trust - Remote Learning](https://www.greenshawlearningtrust.co.uk/virtual-curriculum?group=189&lesson=4570) | [Greenshaw Learning Trust - Remote Learning](https://www.greenshawlearningtrust.co.uk/virtual-curriculum?group=189&lesson=4569) |