**Walton High School Hub Curriculum** 

**Year 9 – Maths**

**Half term 4 (February 2025 – April 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 | Topic | Lesson 1 | Lesson 2 |
| 24/02/25 | Monday | Retrieval week | [Checking and securing understanding of plotting coordinates |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-8/units/graphical-representations-of-linear-equations/lessons/checking-and-securing-understanding-of-plotting-coordinates/overview)  | [Checking and securing understanding of plotting coordinates generated from a rule |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-8/units/graphical-representations-of-linear-equations/lessons/checking-and-securing-understanding-of-plotting-coordinates-generated-from-a-rule/overview)  |
| Tuesday | [Checking and securing understanding of plotting coordinates with technology |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-8/units/graphical-representations-of-linear-equations/lessons/checking-and-securing-understanding-of-plotting-coordinates-with-technology/overview)  | [Checking and securing plotting a relationship |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-8/units/graphical-representations-of-linear-equations/lessons/checking-and-securing-plotting-a-relationship/overview)  |
| Wednesday | [Features of linear relationships |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-8/units/graphical-representations-of-linear-equations/lessons/features-of-linear-relationships/overview)  | [Defining features of linear relationships |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-8/units/graphical-representations-of-linear-equations/lessons/defining-features-of-linear-relationships/overview)  |
| Thursday  | [Positive rate of change from a graph |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-8/units/graphical-representations-of-linear-equations/lessons/positive-rate-of-change-from-a-graph/overview)  | [Negative rate of change from a graph |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-8/units/graphical-representations-of-linear-equations/lessons/negative-rate-of-change-from-a-graph/overview)  |
| Friday | [Rate of change from a coordinate pair |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-8/units/graphical-representations-of-linear-equations/lessons/rate-of-change-from-a-coordinate-pair/overview)  | [The intercept point |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-8/units/graphical-representations-of-linear-equations/lessons/the-intercept-point/overview)  |
| 03/03/25 | Monday  | Linear inequalities | [The equation of a straight line |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-8/units/graphical-representations-of-linear-equations/lessons/the-equation-of-a-straight-line/overview)  | [Finding the equation of the line y = mx + c |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-8/units/graphical-representations-of-linear-equations/lessons/finding-the-equation-of-the-line-y-equals-mx-plus-c/overview)  |
| Tuesday  | [Exploring equality |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-7-l/units/expressions-equations-and-inequalities-7d65/lessons/exploring-equality-60rkac/overview)  | [Inequalities |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-7-l/units/expressions-equations-and-inequalities-7d65/lessons/inequalities-6ngkjc/overview)  |
| Wednesday  | [Further inequalities |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-7-l/units/expressions-equations-and-inequalities-7d65/lessons/further-inequalities-70wp2c/overview)  | [Perimeter expressions |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-7-l/units/expressions-equations-and-inequalities-7d65/lessons/perimeter-expressions-6mv3jt/overview)  |
| Thursday  | [Perimeter inequalities |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-7-l/units/expressions-equations-and-inequalities-7d65/lessons/perimeter-inequalities-cctkjt/overview)  | [Solving inequalities graphically (Part 1) |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-9-l/units/solving-linear-simultaneous-equations-graphically-cfe7/lessons/solving-inequalities-graphically-part-1-cdgp6d/overview)  |
| Friday | [Solving inequalities graphically (Part 2) |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-9-l/units/solving-linear-simultaneous-equations-graphically-cfe7/lessons/solving-inequalities-graphically-part-2-6mtp2r/overview)  | [Shading regions to satisfy a set of inequalities |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-9-l/units/solving-linear-simultaneous-equations-graphically-cfe7/lessons/shading-regions-to-satisfy-a-set-of-inequalities-61h3cd/overview)  |
| 10/03/25 | Monday | Standard form | [Checking and securing understanding of multiples of 10 |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-9/units/standard-form/lessons/checking-and-securing-understanding-of-multiples-of-10/overview)  | [Checking and further securing understanding of the commutative law |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-9/units/standard-form/lessons/checking-and-further-securing-understanding-of-the-commutative-law/overview)  |
| Tuesday | [Multiples of 10 involving negative exponents |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-9/units/standard-form/lessons/multiples-of-10-involving-negative-exponents/overview)  | [Writing large numbers in standard form |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-9/units/standard-form/lessons/writing-large-numbers-in-standard-form/overview)  |
| Wednesday | [Writing small numbers in standard form |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-9/units/standard-form/lessons/writing-small-numbers-in-standard-form/overview)  | [Ordering numbers in standard form |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-9/units/standard-form/lessons/ordering-numbers-in-standard-form/overview)  |
| Thursday | [Problem solving with standard form |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-9/units/standard-form/lessons/problem-solving-with-standard-form/overview)  | [Addition and Subtraction in standard form |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-9-l/units/indices-and-standard-form-7a54/lessons/addition-and-subtraction-in-standard-form-61j34c/overview)  |
| Friday | [Multiplying and dividing in standard form |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-9-l/units/indices-and-standard-form-7a54/lessons/multiplying-and-dividing-in-standard-form-6wv3jc/overview)  | [Mixed problems with standard form |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-9-l/units/indices-and-standard-form-7a54/lessons/mixed-problems-with-standard-form-crw3cd/overview)  |
| 17/03/25 | Monday | Right angle geometry | [Checking understanding of similarity |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-9/units/geometrical-properties-similarity-and-pythagoras-theorem/lessons/checking-understanding-of-similarity/overview)  | [Checking understanding of congruence |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-9/units/geometrical-properties-similarity-and-pythagoras-theorem/lessons/checking-understanding-of-congruence/overview)  |
| Tuesday | [Similarity in shapes |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-9/units/geometrical-properties-similarity-and-pythagoras-theorem/lessons/similarity-in-shapes/overview)  | [Congruence in shapes |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-9/units/geometrical-properties-similarity-and-pythagoras-theorem/lessons/congruence-in-shapes/overview)  |
| Wednesday | [Congruent, similar or neither |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-9/units/geometrical-properties-similarity-and-pythagoras-theorem/lessons/congruent-similar-or-neither/overview) | [Rotational symmetry |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-9/units/geometrical-properties-similarity-and-pythagoras-theorem/lessons/rotational-symmetry/overview)  |
| Thursday | [Congruent triangles (SSS) |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-9/units/geometrical-properties-similarity-and-pythagoras-theorem/lessons/congruent-triangles-sss/overview)  | [Congruent triangles (SAS) |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-9/units/geometrical-properties-similarity-and-pythagoras-theorem/lessons/congruent-triangles-sas/overview) |
| Friday | [Congruent triangles (ASA and AAS) |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-9/units/geometrical-properties-similarity-and-pythagoras-theorem/lessons/congruent-triangles-asa-and-aas/overview)  | [Congruent triangles (RHS) |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-9/units/geometrical-properties-similarity-and-pythagoras-theorem/lessons/congruent-triangles-rhs/overview)  |
| 24/03/25 | Monday  | [Applying the criteria for congruence |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-9/units/geometrical-properties-similarity-and-pythagoras-theorem/lessons/applying-the-criteria-for-congruence/overview)  | [Demonstrating Pythagoras' theorem |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-9/units/geometrical-properties-similarity-and-pythagoras-theorem/lessons/demonstrating-pythagoras-theorem/overview)  |
| Tuesday | [Length of the hypotenuse |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-9/units/geometrical-properties-similarity-and-pythagoras-theorem/lessons/length-of-the-hypotenuse/overview)  | [Length of a shorter side |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-9/units/geometrical-properties-similarity-and-pythagoras-theorem/lessons/length-of-a-shorter-side/overview)  |
| Wednesday | [Determining which side |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-9/units/geometrical-properties-similarity-and-pythagoras-theorem/lessons/determining-which-side/overview)  | [Pythagoras' theorem in context |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-9/units/geometrical-properties-similarity-and-pythagoras-theorem/lessons/pythagoras-theorem-in-context/overview) |
| Thursday | [Problem solving with similarity and Pythagoras' theorem |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-9/units/geometrical-properties-similarity-and-pythagoras-theorem/lessons/problem-solving-with-similarity-and-pythagoras-theorem/overview)  | [Know and Understand Pythagoras' theorem |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-foundation-l/units/pythagoras-theorem-1-e9da/lessons/know-and-understand-pythagoras-theorem-70vp4t/overview)  |
| Friday | [Mixture of Finding a Missing Length |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-foundation-l/units/pythagoras-theorem-1-e9da/lessons/mixture-of-finding-a-missing-length-6mwp6r/overview)  | [Use Pythagoras' theorem to show that a triangle is right-angled |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-foundation-l/units/pythagoras-theorem-2-149e/lessons/use-pythagoras-theorem-to-show-that-a-triangle-is-right-angled-6hhk4r/overview)  |
| 31/03/25 | Monday | Angles in algebra | [Varying the ratio of side lengths in right angle triangles |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-9-l/units/surds-and-trigonometry-56bd/lessons/varying-the-ratio-of-side-lengths-in-right-angle-triangles-cmu36d/overview) | [The case of 30 and 60 degrees |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-9-l/units/surds-and-trigonometry-56bd/lessons/the-case-of-30-and-60-degrees-6mrk2c/overview)  |
| Tuesday | [The sine ratio |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-9-l/units/surds-and-trigonometry-56bd/lessons/the-sine-ratio-61jpcr/overview)  | [The sine and cosine ratios |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-9-l/units/surds-and-trigonometry-56bd/lessons/the-sine-and-cosine-ratios-60wk4d/overview)  |
| Wednesday | [The sine and cosine ratios for 30 and 60 degrees |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-9-l/units/surds-and-trigonometry-56bd/lessons/the-sine-and-cosine-ratios-for-30-and-60-degrees-60r3ed/overview)  | [Finding missing sides using sine and cosine for any angle |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-9-l/units/surds-and-trigonometry-56bd/lessons/finding-missing-sides-using-sine-and-cosine-for-any-angle-ccv3ac/overview) |
| Thursday | [Using inverse sine and cosine to find missing angles |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-9-l/units/surds-and-trigonometry-56bd/lessons/using-inverse-sine-and-cosine-to-find-missing-angles-60v6cr/overview)  | [Sine and cosine graphs |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-9-l/units/surds-and-trigonometry-56bd/lessons/sine-and-cosine-graphs-c8v36t/overview)  |
| Friday | [Varying the ratio of side lengths in right angle triangles |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-9-l/units/surds-and-trigonometry-56bd/lessons/varying-the-ratio-of-side-lengths-in-right-angle-triangles-cmu36d/overview) | [The case of 30 and 60 degrees |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-9-l/units/surds-and-trigonometry-56bd/lessons/the-case-of-30-and-60-degrees-6mrk2c/overview)  |
| 07/04/25 | Monday | Quadratics | [Recognising linear and non-linear graphs |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-9-l/units/quadratic-expressions-9-9-4f5c/lessons/recognising-linear-and-non-linear-graphs-chhk2e/overview)  | [Plotting quadratics (Part 1) |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-9-l/units/quadratic-expressions-9-9-4f5c/lessons/plotting-quadratics-part-1-6wrk2t/overview)  |
| Tuesday | [Plotting quadratics (Part 2) |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-9-l/units/quadratic-expressions-9-9-4f5c/lessons/plotting-quadratics-part-2-70wp8c/overview)  | [Quadratic contexts |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-9-l/units/quadratic-expressions-9-9-4f5c/lessons/quadratic-contexts-6gtpar/overview)  |
| Wednesday | [Maximum and minimum area](https://www.thenational.academy/pupils/programmes/maths-secondary-year-9-l/units/quadratic-expressions-9-9-4f5c/lessons/maximum-and-minimum-area-6njkee/overview)  | [Distributive property |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-9-l/units/quadratic-expressions-9-9-4f5c/lessons/distributive-property-60vkjd/overview)  |
| Thursday | [Expanding double brackets |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-9-l/units/quadratic-expressions-9-9-4f5c/lessons/expanding-double-brackets-75hp2d/overview)  | [Difference of two squares |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-9-l/units/quadratic-expressions-9-9-4f5c/lessons/difference-of-two-squares-6rr68r/overview)  |
| Friday | [Factorising quadratics (Part 1) |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-9-l/units/quadratic-expressions-9-9-4f5c/lessons/factorising-quadratics-part-1-c4v30e/overview)  | [Factorising quadratics (Part 2) |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-9-l/units/quadratic-expressions-9-9-4f5c/lessons/factorising-quadratics-part-2-6cw6cr/overview)  |