**Walton High School Hub Curriculum** 

**Year 10 – MATHS HIGHER**

**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 | TOPIC | Lesson 1 | Lesson 2 |
| 01/09/25 | Monday | Advanced Number |  |  |
| Tuesday | [Checking and securing understanding of converting between fractions and decimals |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-higher/units/arithmetic-procedures-index-laws/lessons/checking-and-securing-understanding-of-converting-between-fractions-and-decimals/overview)  | [Checking and securing understanding of calculating with fractions and decimals |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-higher/units/arithmetic-procedures-index-laws/lessons/checking-and-securing-understanding-of-calculating-with-fractions-and-decimals/overview)  |
| Wednesday | [Converting any recurring decimal to a fraction |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-higher/units/arithmetic-procedures-index-laws/lessons/converting-any-recurring-decimal-to-a-fraction/overview)  | [Checking and securing understanding of prime factorisation |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-higher/units/arithmetic-procedures-index-laws/lessons/checking-and-securing-understanding-of-prime-factorisation/overview)  |
| Thursday  | [Checking and securing understanding of LCM and HCF |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-higher/units/arithmetic-procedures-index-laws/lessons/checking-and-securing-understanding-of-lcm-and-hcf/overview)  | [Checking and securing understanding of roots and integer indices |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-higher/units/arithmetic-procedures-index-laws/lessons/checking-and-securing-understanding-of-roots-and-integer-indices/overview)  |
| Friday | [The laws of indices - multiplication |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-higher/units/arithmetic-procedures-index-laws/lessons/the-laws-of-indices-multiplication/overview)  | [The laws of indices - division |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-higher/units/arithmetic-procedures-index-laws/lessons/the-laws-of-indices-division/overview)  |
| 08/09/25 | Monday  | Indices | [Indices and Radicals |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-9-l/units/indices-and-standard-form-7a54/lessons/indices-and-radicals-c5h6ad/overview)  | [Indices and power of 0 |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-9-l/units/indices-and-standard-form-7a54/lessons/indices-and-power-of-0-c8w30c/overview)  |
| Tuesday  | [Expressing powers of in different bases |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-9-l/units/indices-and-standard-form-7a54/lessons/expressing-powers-of-in-different-bases-c8rk4r/overview) | [Laws of indices |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-9-l/units/indices-and-standard-form-7a54/lessons/laws-of-indices-6mr3je/overview)  |
| Wednesday  | [Fractional Indices (Part 1) |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-9-l/units/indices-and-standard-form-7a54/lessons/fractional-indices-part-1-c5hp8t/overview)  | [Fractional Indices (Part 2) |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-9-l/units/indices-and-standard-form-7a54/lessons/fractional-indices-part-2-6mwp8c/overview)  |
| Thursday  | [Negative indices |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-9-l/units/indices-and-standard-form-7a54/lessons/negative-indices-cgvpac/overview)  | [Powers of 10 |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-9-l/units/indices-and-standard-form-7a54/lessons/powers-of-10-c9hp6c/overview)  |
| Friday | [Multiply powers |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-higher-l/units/types-of-numbers-and-rules-of-indices-8615/lessons/multiply-powers-c5jk4e/overview)  | [Divide powers |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-higher-l/units/types-of-numbers-and-rules-of-indices-8615/lessons/divide-powers-6wt36t/overview)  |
| 15/09/25 | Monday | [Powers of powers |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-higher-l/units/types-of-numbers-and-rules-of-indices-8615/lessons/powers-of-powers-75k32c/overview)  | [Manipulating powers |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-higher-l/units/types-of-numbers-and-rules-of-indices-8615/lessons/manipulating-powers-ctk38d/overview)  |
| Tuesday | [Square and cube numbers |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-higher-l/units/types-of-numbers-and-rules-of-indices-8615/lessons/square-and-cube-numbers-6hjp8t/overview)  | [Square roots and cube roots |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-higher-l/units/types-of-numbers-and-rules-of-indices-8615/lessons/square-roots-and-cube-roots-6nj64d/overview)  |
| Wednesday | [Higher powers |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-higher-l/units/types-of-numbers-and-rules-of-indices-8615/lessons/higher-powers-64upad/overview)  | [Higher roots |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-higher-l/units/types-of-numbers-and-rules-of-indices-8615/lessons/higher-roots-69k3gd/overview)  |
| Thursday | [Negative integer indices and the power of zero |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-higher-l/units/negative-and-fractional-indices-d4ec/lessons/negative-integer-indices-and-the-power-of-zero-70w64t/overview)  | [Fractional indices |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-higher-l/units/negative-and-fractional-indices-d4ec/lessons/fractional-indices-c4r64d/overview)  |
| Friday | [Fractional indices (advanced) |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-higher-l/units/negative-and-fractional-indices-d4ec/lessons/fractional-indices-advanced-74rk4d/overview)  | [Negative and fractional indices (mixed skills) |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-higher-l/units/negative-and-fractional-indices-d4ec/lessons/negative-and-fractional-indices-mixed-skills-c5h64c/overview)  |
| 22/09/25 | Monday | Surds | [Identify rational and irrational numbers |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-higher-l/units/simplifying-surds-71e6/lessons/identify-rational-and-irrational-numbers-69j32c/overview)  | [Simplify simple surds |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-higher-l/units/simplifying-surds-71e6/lessons/simplify-simple-surds-6mvk8c/overview)  |
| Tuesday | [Simplify a surd of the form a√b |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-higher-l/units/simplifying-surds-71e6/lessons/simplify-a-surd-of-the-form-ab-cctp4r/overview)  | [Write a√b in form √x |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-higher-l/units/simplifying-surds-71e6/lessons/write-ab-in-form-x-crr3jr/overview)  |
| Wednesday | [Add two surds |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-higher-l/units/adding-surds-a57d/lessons/add-two-surds-6wwk0c/overview)  | [Subtract two surds |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-higher-l/units/adding-surds-a57d/lessons/subtract-two-surds-6njkac/overview)  |
| Thursday | [Add two surds where you need to simplify |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-higher-l/units/adding-surds-a57d/lessons/add-two-surds-where-you-need-to-simplify-chh6cc/overview)  | [Subtract two surds where you need to simplify |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-higher-l/units/adding-surds-a57d/lessons/subtract-two-surds-where-you-need-to-simplify-6gukce/overview)  |
| Friday | [Multiply Two Surds and Simplify |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-higher-l/units/multiplying-surds-5b65/lessons/multiply-two-surds-and-simplify-6wt62c/overview)  | [Multiply Two Surds with Coefficients |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-higher-l/units/multiplying-surds-5b65/lessons/multiply-two-surds-with-coefficients-69j6ac/overview)  |
| 29/09/25 | Monday  | [Expand Single Brackets Containing a Surd |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-higher-l/units/multiplying-surds-5b65/lessons/expand-single-brackets-containing-a-surd-6cvpcd/overview)  | [Expand Double Brackets Containing Surds |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-higher-l/units/multiplying-surds-5b65/lessons/expand-double-brackets-containing-surds-cgt62r/overview)  |
| Tuesday | [Dividing Surds (Part 1) |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-higher-l/units/dividing-and-rationalising-surds-05ee/lessons/dividing-surds-part-1-6ngkce/overview)  | [Dividing Surds (Part 2) |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-higher-l/units/dividing-and-rationalising-surds-05ee/lessons/dividing-surds-part-2-6gt30t/overview)  |
| Wednesday | [Rationalising Surds (Part 1) |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-higher-l/units/dividing-and-rationalising-surds-05ee/lessons/rationalising-surds-part-1-68v6ad/overview)  | [Rationalising Surds (Part 2) |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-higher-l/units/dividing-and-rationalising-surds-05ee/lessons/rationalising-surds-part-2-ccu3cd/overview)  |
| Thursday | [Accuracy of final answers |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-higher/units/surds/lessons/accuracy-of-final-answers/overview)  | [Identifying square factors to support simplifying surds |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-higher/units/surds/lessons/identifying-square-factors-to-support-simplifying-surds/overview)  |
| Friday | [The distributive law with surds |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-higher/units/surds/lessons/the-distributive-law-with-surds/overview)  | [The distributive law with two or more binomials |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-higher/units/surds/lessons/the-distributive-law-with-two-or-more-binomials/overview)  |
| 06/10/25 | Monday | Crossover algebra | [Checking and securing understanding of simplifying |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-higher/units/algebraic-manipulation/lessons/checking-and-securing-understanding-of-simplifying/overview)  | [Checking and securing understanding of substitution |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-higher/units/algebraic-manipulation/lessons/checking-and-securing-understanding-of-substitution/overview)  |
| Tuesday | [Further algebraic terminology |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-higher/units/algebraic-manipulation/lessons/further-algebraic-terminology/overview)  | [Checking and securing understanding of expanding a single bracket |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-higher/units/algebraic-manipulation/lessons/checking-and-securing-understanding-of-expanding-a-single-bracket/overview)  |
| Wednesday | [Checking and securing understanding of factorising |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-higher/units/algebraic-manipulation/lessons/checking-and-securing-understanding-of-factorising/overview)  | [Checking and securing understanding of forming linear equations |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-higher/units/algebraic-manipulation/lessons/checking-and-securing-understanding-of-forming-linear-equations/overview)  |
| Thursday | [Checking and securing understanding of solving and interpreting linear equations |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-higher/units/algebraic-manipulation/lessons/checking-and-securing-understanding-of-solving-and-interpreting-linear-equations/overview)  | [Checking and securing understanding of changing the subject |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-higher/units/algebraic-manipulation/lessons/checking-and-securing-understanding-of-changing-the-subject/overview)  |
| Friday | [Checking and securing understanding of the product of two binomials |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-higher/units/algebraic-manipulation/lessons/checking-and-securing-understanding-of-the-product-of-two-binomials/overview)  | [The product of three binomials |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-higher/units/algebraic-manipulation/lessons/the-product-of-three-binomials/overview)  |
| 13/10/25 | Monday | [Substitute a positive term into a formula |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-higher-l/units/substitution-and-rearranging-formulae-a512/lessons/substitute-a-positive-term-into-a-formula-cdgkge/overview)  | [Substitute a negative term into a formula |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-higher-l/units/substitution-and-rearranging-formulae-a512/lessons/substitute-a-negative-term-into-a-formula-75j3cc/overview)  |
| Tuesday | [Change the subject of a formula |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-higher-l/units/substitution-and-rearranging-formulae-a512/lessons/change-the-subject-of-a-formula-6hhp2t/overview)  | [Change the subject of a formula with squares and square roots |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-higher-l/units/substitution-and-rearranging-formulae-a512/lessons/change-the-subject-of-a-formula-with-squares-and-square-roots-64t66d/overview)  |
| Wednesday | [Simplify Expressions by Collecting Like Terms |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-core-l/units/collecting-indices-expand-and-simplify-solving-equations-1-37bf/lessons/simplify-expressions-by-collecting-like-terms-cct68d/overview)  | [Simplify Expressions by Multiplying Terms |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-core-l/units/collecting-indices-expand-and-simplify-solving-equations-1-37bf/lessons/simplify-expressions-by-multiplying-terms-c9h6ad/overview)  |
| Thursday | [Expand a Term over a Single Bracket |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-core-l/units/collecting-indices-expand-and-simplify-solving-equations-1-37bf/lessons/expand-a-term-over-a-single-bracket-c8v62c/overview)  | [Expand a Term over a Single Bracket including Powers |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-core-l/units/collecting-indices-expand-and-simplify-solving-equations-1-37bf/lessons/expand-a-term-over-a-single-bracket-including-powers-74wp8t/overview)  |
| Friday |  |  |
| 20/10/25 | Monday | [Expand 2 brackets and simplify expressions (Part 1) |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-core-l/units/collecting-indices-expand-and-simplify-solving-equations-1-37bf/lessons/expand-2-brackets-and-simplify-expressions-part-1-crvk4c/overview)  | [Expand 2 brackets and simplify expressions (Part 2) |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-core-l/units/collecting-indices-expand-and-simplify-solving-equations-1-37bf/lessons/expand-2-brackets-and-simplify-expressions-part-2-60vkgd/overview)  |
| Tuesday | [Expand and simplify double brackets |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-core-l/units/collecting-indices-expand-and-simplify-solving-equations-1-37bf/lessons/expand-and-simplify-double-brackets-cdhkjc/overview)  | [Expand and Simplify Double Brackets (Coefficient of x Greater than 1) |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-core-l/units/collecting-indices-expand-and-simplify-solving-equations-1-37bf/lessons/expand-and-simplify-double-brackets-coefficient-of-greater-than-1-c8wp4e/overview)  |
| Wednesday | [Multiplication Law for indices |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-core-l/units/collecting-indices-expand-and-simplify-solving-equations-1-37bf/lessons/multiplication-law-for-indices-c9j68c/overview)  | [Division Law for indices |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-core-l/units/collecting-indices-expand-and-simplify-solving-equations-1-37bf/lessons/division-law-for-indices-cru30d/overview)  |
| Thursday | [Power Law for Indices |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-core-l/units/collecting-indices-expand-and-simplify-solving-equations-1-37bf/lessons/power-law-for-indices-64w32r/overview)  | [Combining Index Laws |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-core-l/units/collecting-indices-expand-and-simplify-solving-equations-1-37bf/lessons/combining-index-laws-chh64t/overview)  |
| Friday | [Solving one-step equations |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-core-l/units/collecting-indices-expand-and-simplify-solving-equations-1-37bf/lessons/solving-one-step-equations-chk32d/overview)  | [Solving two-step equations |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-core-l/units/collecting-indices-expand-and-simplify-solving-equations-1-37bf/lessons/solving-two-step-equations-60tk8d/overview)  |