**Walton High School Hub Curriculum** 

**Year 11 FOUNDATION – Maths**

**Half term 2 (November 2024 – December 2024)**

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 |
| 04/11/24 | Monday | Pythagoras | [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) | [Find the length of the hypotenuse |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-foundation-l/units/pythagoras-theorem-1-e9da/lessons/find-the-length-of-the-hypotenuse-6xgk6t/overview) |
| Tuesday | [Find the length of the shorter side |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-foundation-l/units/pythagoras-theorem-1-e9da/lessons/find-the-length-of-the-shorter-side-6ru6ce/overview) | [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) |
| Wednesday | [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) | [Use Pythagoras' Theorem to find the length of a line segment |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-foundation-l/units/pythagoras-theorem-2-149e/lessons/use-pythagoras-theorem-to-find-the-length-of-a-line-segment-6muk6e/overview) |
| Thursday | [Use Pythagoras' Theorem with Isosceles Triangles |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-foundation-l/units/pythagoras-theorem-2-149e/lessons/use-pythagoras-theorem-with-isosceles-triangles-60u6ad/overview) | [Apply Pythagoras' Theorem to two triangles |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-foundation-l/units/pythagoras-theorem-2-149e/lessons/apply-pythagoras-theorem-to-two-triangles-6dh3ad/overview) |
| Friday | [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) | [Find the length of the hypotenuse |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-foundation-l/units/pythagoras-theorem-1-e9da/lessons/find-the-length-of-the-hypotenuse-6xgk6t/overview) |
| 11/11/24 | Monday | Trigonometry | [Know tangent, sine and cosine |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-core-l/units/trigonometry-1-0125/lessons/know-tangent-sine-and-cosine-6mvk4d/overview) | [Use tangent to find a length |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-core-l/units/trigonometry-1-0125/lessons/use-tangent-to-find-a-length-c5gkge/overview) |
| Tuesday | [Use sine and cosine to find a length |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-core-l/units/trigonometry-1-0125/lessons/use-sine-and-cosine-to-find-a-length-75hk0c/overview) | [Applying Trigonometry |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-core-l/units/trigonometry-1-0125/lessons/applying-trigonometry-6mup2c/overview) |
| Wednesday | [Use trigonometry to find the perpendicular height of a triangle |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-core-l/units/trigonometry-2-5cbb/lessons/use-trigonometry-to-find-the-perpendicular-height-of-a-triangle-c4v3ee/overview) | [Solve basic trigonometry equations |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-core-l/units/trigonometry-2-5cbb/lessons/solve-basic-trigonometry-equations-6cup6r/overview) |
| Thursday | [Use inverse functions to find an angle |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-core-l/units/trigonometry-2-5cbb/lessons/use-inverse-functions-to-find-an-angle-61jp2d/overview) | [Solve problems mixing angles and sides |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-core-l/units/trigonometry-2-5cbb/lessons/solve-problems-mixing-angles-and-sides-6djk2e/overview) |
| Friday | [Know the trigonometry ratios for 0°, 30°,45°,60° and 90° |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-core-l/units/trigonometry-3-945e/lessons/know-the-trigonometry-ratios-for-0-30-45-60-and-90-6nk3ee/overview) | [Substitute the exact values to find a missing length |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-core-l/units/trigonometry-3-945e/lessons/substitute-the-exact-values-to-find-a-missing-length-cgup4d/overview) |
| 18/11/24 | Monday | [Use trigonometry to solve bearing problems |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-core-l/units/trigonometry-3-945e/lessons/use-trigonometry-to-solve-bearing-problems-6xgp4c/overview) | [Know when to use Pythagoras or Trigonometry to solve problems |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-core-l/units/trigonometry-3-945e/lessons/know-when-to-use-pythagoras-or-trigonometry-to-solve-problems-6wt3ac/overview) |
| Tuesday | [Know tangent, sine and cosine |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-core-l/units/trigonometry-1-0125/lessons/know-tangent-sine-and-cosine-6mvk4d/overview) | [Use tangent to find a length |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-core-l/units/trigonometry-1-0125/lessons/use-tangent-to-find-a-length-c5gkge/overview) |
| Wednesday | [Use sine and cosine to find a length |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-core-l/units/trigonometry-1-0125/lessons/use-sine-and-cosine-to-find-a-length-75hk0c/overview) | [Applying Trigonometry |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-core-l/units/trigonometry-1-0125/lessons/applying-trigonometry-6mup2c/overview) |
| Thursday | [Use trigonometry to find the perpendicular height of a triangle |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-core-l/units/trigonometry-2-5cbb/lessons/use-trigonometry-to-find-the-perpendicular-height-of-a-triangle-c4v3ee/overview) | [Solve basic trigonometry equations |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-core-l/units/trigonometry-2-5cbb/lessons/solve-basic-trigonometry-equations-6cup6r/overview) |
| Friday | [Use inverse functions to find an angle |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-core-l/units/trigonometry-2-5cbb/lessons/use-inverse-functions-to-find-an-angle-61jp2d/overview) | [Solve problems mixing angles and sides |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-core-l/units/trigonometry-2-5cbb/lessons/solve-problems-mixing-angles-and-sides-6djk2e/overview) |
| 25/11/24 | Monday | [Know the trigonometry ratios for 0°, 30°,45°,60° and 90° |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-core-l/units/trigonometry-3-945e/lessons/know-the-trigonometry-ratios-for-0-30-45-60-and-90-6nk3ee/overview) | [Substitute the exact values to find a missing length |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-core-l/units/trigonometry-3-945e/lessons/substitute-the-exact-values-to-find-a-missing-length-cgup4d/overview) |
| Tuesday | [Use trigonometry to solve bearing problems |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-core-l/units/trigonometry-3-945e/lessons/use-trigonometry-to-solve-bearing-problems-6xgp4c/overview) | [Know when to use Pythagoras or Trigonometry to solve problems |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-core-l/units/trigonometry-3-945e/lessons/know-when-to-use-pythagoras-or-trigonometry-to-solve-problems-6wt3ac/overview) |
| Wednesday | [Know tangent, sine and cosine |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-core-l/units/trigonometry-1-0125/lessons/know-tangent-sine-and-cosine-6mvk4d/overview) | [Use tangent to find a length |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-core-l/units/trigonometry-1-0125/lessons/use-tangent-to-find-a-length-c5gkge/overview) |
| Thursday | [Use sine and cosine to find a length |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-core-l/units/trigonometry-1-0125/lessons/use-sine-and-cosine-to-find-a-length-75hk0c/overview) | [Applying Trigonometry |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-core-l/units/trigonometry-1-0125/lessons/applying-trigonometry-6mup2c/overview) |
| Friday | [Use trigonometry to find the perpendicular height of a triangle |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-core-l/units/trigonometry-2-5cbb/lessons/use-trigonometry-to-find-the-perpendicular-height-of-a-triangle-c4v3ee/overview) | [Solve basic trigonometry equations |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-core-l/units/trigonometry-2-5cbb/lessons/solve-basic-trigonometry-equations-6cup6r/overview) |
| 02/12/24 | Monday | [Use inverse functions to find an angle |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-core-l/units/trigonometry-2-5cbb/lessons/use-inverse-functions-to-find-an-angle-61jp2d/overview) | [Solve problems mixing angles and sides |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-core-l/units/trigonometry-2-5cbb/lessons/solve-problems-mixing-angles-and-sides-6djk2e/overview) |
| Tuesday | [Know the trigonometry ratios for 0°, 30°,45°,60° and 90° |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-core-l/units/trigonometry-3-945e/lessons/know-the-trigonometry-ratios-for-0-30-45-60-and-90-6nk3ee/overview) | [Substitute the exact values to find a missing length |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-core-l/units/trigonometry-3-945e/lessons/substitute-the-exact-values-to-find-a-missing-length-cgup4d/overview) |
| Wednesday | [Use trigonometry to solve bearing problems |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-core-l/units/trigonometry-3-945e/lessons/use-trigonometry-to-solve-bearing-problems-6xgp4c/overview) | [Know when to use Pythagoras or Trigonometry to solve problems |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-core-l/units/trigonometry-3-945e/lessons/know-when-to-use-pythagoras-or-trigonometry-to-solve-problems-6wt3ac/overview) |
| Thursday | [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) | [Find the length of the hypotenuse |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-foundation-l/units/pythagoras-theorem-1-e9da/lessons/find-the-length-of-the-hypotenuse-6xgk6t/overview) |
| Friday | [Find the length of the shorter side |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-foundation-l/units/pythagoras-theorem-1-e9da/lessons/find-the-length-of-the-shorter-side-6ru6ce/overview) | [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) |
| 09/12/24 | Monday | Simultaneous equations | [Solve linear simultaneous equations where one of the coefficients is equal |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-11-foundation-l/units/simultaneous-equations-linear-64b3/lessons/solve-linear-simultaneous-equations-where-one-of-the-coefficients-is-equal-75k64r/overview) | [Solve linear simultaneous equations where you need to multiply one of the equations |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-11-foundation-l/units/simultaneous-equations-linear-64b3/lessons/solve-linear-simultaneous-equations-where-you-need-to-multiply-one-of-the-equations-6nh64t/overview) |
| Tuesday | [Solve linear simultaneous equations where you need to multiply both equations |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-11-foundation-l/units/simultaneous-equations-linear-64b3/lessons/solve-linear-simultaneous-equations-where-you-need-to-multiply-both-equations-c8u62d/overview) | [Solve linear simultaneous equations where you need to first rearrange |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-11-foundation-l/units/simultaneous-equations-linear-64b3/lessons/solve-linear-simultaneous-equations-where-you-need-to-first-rearrange-6gv38c/overview) |
| Wednesday | [Checking and securing understanding of solving with simple algebraic fractions |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-11-foundation/units/algebraic-fractions/lessons/checking-and-securing-understanding-of-solving-with-simple-algebraic-fractions/overview) | [Checking and securing understanding of changing the subject with simple algebraic fractions |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-11-foundation/units/algebraic-fractions/lessons/checking-and-securing-understanding-of-changing-the-subject-with-simple-algebraic-fractions/overview) |
| Thursday | [Forming simultaneous equations |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-foundation/units/simultaneous-equations-2-variables/lessons/forming-simultaneous-equations/overview) | [Combining equations |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-foundation/units/simultaneous-equations-2-variables/lessons/combining-equations/overview) |
| Friday | [Solving algebraic simultaneous equations by elimination |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-foundation/units/simultaneous-equations-2-variables/lessons/solving-algebraic-simultaneous-equations-by-elimination/overview) | [Solving more complex simultaneous equations by elimination |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-foundation/units/simultaneous-equations-2-variables/lessons/solving-more-complex-simultaneous-equations-by-elimination/overview) |
| 16/12/24 | Monday | [Solving more complex simultaneous equations by elimination |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-foundation/units/simultaneous-equations-2-variables/lessons/solving-more-complex-simultaneous-equations-by-elimination/overview) | [Solving simultaneous linear equations by substitution |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-foundation/units/simultaneous-equations-2-variables/lessons/solving-simultaneous-linear-equations-by-substitution/overview) |
| Tuesday | [Solving simultaneous linear equations graphically |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-foundation/units/simultaneous-equations-2-variables/lessons/solving-simultaneous-linear-equations-graphically/overview) | [Solving simultaneous equations via any method |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-foundation/units/simultaneous-equations-2-variables/lessons/solving-simultaneous-equations-via-any-method/overview) |
| Wednesday | [Solve linear simultaneous equations where one of the coefficients is equal |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-11-foundation-l/units/simultaneous-equations-linear-64b3/lessons/solve-linear-simultaneous-equations-where-one-of-the-coefficients-is-equal-75k64r/overview) | [Problem solving with simultaneous equations |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-10-foundation/units/simultaneous-equations-2-variables/lessons/problem-solving-with-simultaneous-equations/overview) |
| Thursday | [Solve linear simultaneous equations where you need to multiply both equations |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-11-foundation-l/units/simultaneous-equations-linear-64b3/lessons/solve-linear-simultaneous-equations-where-you-need-to-multiply-both-equations-c8u62d/overview) | [Solve linear simultaneous equations where you need to first rearrange |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-11-foundation-l/units/simultaneous-equations-linear-64b3/lessons/solve-linear-simultaneous-equations-where-you-need-to-first-rearrange-6gv38c/overview) |
| Friday | [Checking and securing understanding of solving with simple algebraic fractions |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-11-foundation/units/algebraic-fractions/lessons/checking-and-securing-understanding-of-solving-with-simple-algebraic-fractions/overview) | [Checking and securing understanding of changing the subject with simple algebraic fractions |](https://www.thenational.academy/pupils/programmes/maths-secondary-year-11-foundation/units/algebraic-fractions/lessons/checking-and-securing-understanding-of-changing-the-subject-with-simple-algebraic-fractions/overview) |