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| Subject: Mathematics Year 10C Curriculum Map 2024-2025 | | | |
| Terms | **Topics covered** and **core knowledge and skills** | Links to careers | Links to the Knowledge organiser and other additional resources |
| Half term 1 | **Unit 1: NP4-9 Essentials**  NP4   |  | | --- | | Powers and roots | | Index laws | | Prime factors |   NP5   |  | | --- | | Order of operations with four operations, exponents and brackets to break the order |   NP6   |  | | --- | | Four operations with directed numbers | | Powers of negative numbers |   NP7   |  | | --- | | Adding and subtracting fractions | | Finding a fraction given the whole, finding a whole given a fraction. | | multiplying and dividing fractions, fraction of an amount (incl. fractions of fractions) with link to multiplying; increasing and decreasing by a fraction by multiplying |   NP8   |  | | --- | | Equivalent fractions, decimals and percentages | | Recurring and terminating decimals | | Percentages of amounts, percentage increase and decrease |   NP9   |  | | --- | | Fluent use of the calculator | | Rounding, truncation and error intervals | | Estimation and approximation |   **Unit 2: A3-8 Essentials**  A3   |  | | --- | | Expand and factorise a single bracket |   A4   |  | | --- | | Solve equations with an unknown on both sides | | Solve equations containing brackets | | Solve simple equations containing fractions | | Forming and solving equations |   A5   |  | | --- | | Substituting into a formulae to find an unknown variable | | Forming formulae and using to find unknowns | | Rearranging linear formulae |   A6   |  | | --- | | Find the midpoint of a line segment | | Plot a linear graph | | Understand y=mx+c | | Find the equation of a line from the gradient and y intercept | | Identify parallel lines from their equations | | Plot a quadratic graph |   A7   |  | | --- | | Generate terms of a sequence | | Find the nth term of a sequence | | Recognise common sequences |   A8   |  | | --- | | Representing inequalities on a number line | | Solve linear inequalities | | Represent inequalities involving x or y by shading on a graph | | Approximation: <https://www.youtube.com/watch?v=cABMOLgTkYM>  Decimals:  <https://www.youtube.com/watch?v=X0Gl72XKiyI>  Fractions:  <https://www.youtube.com/watch?v=3pccvFEWO0k>  Percentages:  <https://www.youtube.com/watch?v=7EB0H1bhGTo>  Algebra: <https://www.youtube.com/watch?v=c4xwvFtsrMU>  Graphs:  <https://www.youtube.com/watch?v=JcEHR6O5E6Q>  Inequalities:  <https://www.youtube.com/watch?v=5sOw5og5sgc>  Quadratic Equations:  <https://www.youtube.com/watch?v=QAmbU12zs8c>  Sequences:  <https://www.youtube.com/watch?v=7Vf6BJwdy_0> | This link would take you to the KO on our website  <https://teachers.thenational.academy/subjects/maths/key-stages/key-stage-4>  <https://www.bbc.co.uk/bitesize/subjects/z38pycw>  <https://vle.mathswatch.co.uk/vle/>  <https://corbettmaths.com/contents/> |
| Half term 2 | **Continue Unit 2: A3-8 Essentials**  **Unit 3: NP10-11 Essentials**  NP10   |  | | --- | | Using ratio tables for direct and inverse proportion | | Value for money | | Exchange rates | | Recipes | | Decimal multipliers | | Finding a percentage change |   NP11   |  | | --- | | Simplifying ratios | | 1:n and n:1 | | Ratios and fractions | | Finding parts of a ratio given another part | | Finding the value of parts given the whole | | Finding the value of parts in a ratio given the difference | | Finance:  <https://www.youtube.com/watch?v=Yjc_VxMMCy8>  Proportion:  <https://www.youtube.com/watch?v=Mz4nMRtTDCw>  Ratio:  <https://www.youtube.com/watch?v=BU9mKIvfxYU> |  |