

Year 10 – Maths – Home Learning

To support your home learning during next few days and weeks, you are going to be using the resources prepared by Oak National Academy

The topics for each term link to the scheme of learning that students follow in school so you will be covering the same work at home as you would be in school.

The link below takes you to the Year 10 scheme of learning from our website.

<https://www.uppinghamcollege.org.uk/attachments/download.asp?file=571&type=pdf>

As you follow the links provided, you will see that each Oak National Academy topic is divided into several lessons. You should be aiming to complete three or four of these lessons per week as a minimum, five or six would be ideal. In your exercise book, make sure you write the title for each lesson, then watch the video and follow the instructions given. You may wish to make some notes of key points in your book and we recommend that you write down examples to refer to later. As you complete the exit quiz, make a note of your score.

It would also be a good idea for you to keep an eye on Show My Homework and to have a go at the tasks being set for your class. This work can then be submitted online and reviewed by your teacher.

Different students will work through the lessons at a different rate. Some students may find it helpful to look at the review sections prior to starting the new work as this will enable them to revisit worked covered previously. Some will complete each part of a topic, others may find they come to a natural pause part way through.

If you need guidance about which section to focus on then please message your maths teacher for support with this.

All we ask is that you do your best! Good luck!

Work covered during Year Nine – Frequently Reviewed during Year 10 and 11

Foundation	Additional Content for Higher
Directed Numbers https://classroom.thenational.academy/units/directed-numbers-fe66	Histograms https://classroom.thenational.academy/units/histograms-5101
Four Rules of Number https://classroom.thenational.academy/units/4-rules-of-number-0da4	Data Collection Higher https://classroom.thenational.academy/units/data-collection-higher-b22e
Types of Number https://classroom.thenational.academy/units/types-of-numbers-1731	Scatter Diagrams https://classroom.thenational.academy/units/scatter-diagrams-frequency-trees-averages-3596
Factors, Multiples and Primes https://classroom.thenational.academy/units/factors-multiple-and-primes-211b	Higher Data 1 https://classroom.thenational.academy/units/higher-data-1-cf-and-box-plots-bcfa
HCF and LCM https://classroom.thenational.academy/units/hcf-and-lcm-872d	Upper and Lower Bounds https://classroom.thenational.academy/units/upper-and-lower-bounds-39dd
Rounding and Estimation https://classroom.thenational.academy/units/rounding-and-estimating-2f3b	
Fractions – Equivalentents https://classroom.thenational.academy/units/fraction-equivalentents-41bc	
Fractions – Addition and Subtraction https://classroom.thenational.academy/units/fractions-1-adding-and-subtracting-086a	
Fractions – Multiply and Divide	

https://classroom.thenational.academy/units/fractions-2-multiplying-and-dividing-4107	
Fractions – Change https://classroom.thenational.academy/units/fraction-change-075b	
Frequency Charts https://classroom.thenational.academy/units/frequency-charts-data-collection-bar-and-pictograms-1f5e	
Averages https://classroom.thenational.academy/units/averages-from-a-list-and-tables-stem-and-leaf-2afc	
Charts and Tables https://classroom.thenational.academy/units/charts-and-tables-pie-chart-and-two-way-tables-f292	
Scatter Diagrams and Frequency Trees https://classroom.thenational.academy/units/scatter-diagrams-and-frequency-trees-1bf2	

Term One:

Foundation	Additional Content for Higher
Rules of Indices (Numbers) https://classroom.thenational.academy/units/rules-of-indices-numbers-c78c	Types of Numbers and Rules of Indices https://classroom.thenational.academy/units/types-of-numbers-and-rules-of-indices-8615

Rules of Indices https://classroom.thenational.academy/units/rules-of-indices-40cc	Negative and Fractional Indices https://classroom.thenational.academy/units/negative-and-fractional-indices-d4ec
Standard Form (write and convert) https://classroom.thenational.academy/units/standard-form-writing-and-converting-f42a	
Standard Form (four operations) https://classroom.thenational.academy/units/standard-form-4-operations-56a8	
Collect like terms, simplifying https://classroom.thenational.academy/units/collecting-like-terms-simplifying-59b1	
Expand and simplify brackets https://classroom.thenational.academy/units/expand-and-simplify-brackets-8710	
Substitution and Rearranging Formulae https://classroom.thenational.academy/units/substitution-and-rearranging-formulae-a512	
Factorising (single bracket) https://classroom.thenational.academy/units/factorising-single-bracket-9220	

Term Two:

Foundation	Additional Content for Higher
Percentages https://classroom.thenational.academy/units/percentages-971e	Circle Theorems 1 https://classroom.thenational.academy/units/circle-theorems-1-1521
Percentage Increase and Decrease https://classroom.thenational.academy/units/percentage-increase-and-decrease-fc15	Circle Theorems 2 https://classroom.thenational.academy/units/circle-theorems-2-5438
Repeated Percentage Change https://classroom.thenational.academy/units/repeated-percentage-change-a753	Constructions and Loci https://classroom.thenational.academy/units/constructions-loci-a787
FDP Equivalentents https://classroom.thenational.academy/units/fdp-equivalentents-2130	Recurring Decimals https://classroom.thenational.academy/units/recurring-decimals-0411
Decimals https://classroom.thenational.academy/units/decimals-9913	
Angle Facts https://classroom.thenational.academy/units/angle-facts-e0ea	
Parallel Lines & Polygons 1 https://classroom.thenational.academy/units/parallel-lines-and-polygons-1-8396	
Polygons 2 https://classroom.thenational.academy/units/polygons-2-interior-and-exterior-043c	
Bearings https://classroom.thenational.academy/units/bearings-7867	

Constructions https://classroom.thenational.academy/units/constructions-1f88	
Loci https://classroom.thenational.academy/units/loci-2192	

Term Three:

Foundation	Additional Content for Higher
Area and Perimeter https://classroom.thenational.academy/units/area-and-perimeter-7857	Simplifying Surds https://classroom.thenational.academy/units/simplifying-surds-71e6
Circles https://classroom.thenational.academy/units/circles-c694	Adding Surds https://classroom.thenational.academy/units/adding-surds-a57d
Parts of Circles 1 https://classroom.thenational.academy/units/parts-of-circles-1-semi-and-quarter-circles-b052	Multiplying Surds https://classroom.thenational.academy/units/multiplying-surds-5b65
	Dividing and Rationalising Surds https://classroom.thenational.academy/units/dividing-and-rationalising-surds-05ee
	Parts of a Circle 1 & 2 https://classroom.thenational.academy/units/parts-of-a-circle-1-2-0fd7

Term Four:

Foundation	Additional Content for Higher
Solving Equations 1	Algebraic Fractions https://classroom.thenational.academy/units/algebraic-fractions-4926

https://classroom.thenational.academy/units/solving-equations-1-one-step-two-step-and-brackets-2ba6	
Solving equations 2 https://classroom.thenational.academy/units/solving-equations-2-simple-algebraic-fractions-5494	Further Algebraic Fractions https://classroom.thenational.academy/units/further-algebraic-fractions-2758
Factorise and solve Quadratics https://classroom.thenational.academy/units/factorise-and-solve-a-quadratic-a-1-876e	Factorise and solve a Quadratic ($a = 1$) https://classroom.thenational.academy/units/factorise-and-solve-a-quadratic-a-1-876e
	Factorise and solve a Quadratic ($a > 1$) https://classroom.thenational.academy/units/factorise-and-solve-quadratics-a-1-70f2

Term Five:

Foundation	Additional Content for Higher
Ratio 1 https://classroom.thenational.academy/units/ratio-1-a08e	Direct and Inverse Proportion https://classroom.thenational.academy/units/direct-and-inverse-proportion-e702
Ratio 2 https://classroom.thenational.academy/units/ratio-2-ratio-and-fractions-direct-proportion-best-buy-4eff	Compound Measures https://classroom.thenational.academy/units/compound-measures-db84
	Translate and Vectors 1 https://classroom.thenational.academy/units/translate-and-vectors-1-4275

	Vectors 2 https://classroom.thenational.academy/units/vectors-2-429e
	Higher Vectors 1 https://classroom.thenational.academy/units/higher-vectors-1-a8ef
	Higher Vectors 2 and Congruent Triangles https://classroom.thenational.academy/units/higher-vectors-2-and-congruent-triangles-b62d

Term Six:

Preparation and revision for End of Year Exams