



# Wykhampark Academy Banbury

an Aspirations Academy

Ruskin Road, Banbury, OX16 9HY  
Telephone: 01295 251451  
Email: [office@wykhampark-aspirations.org](mailto:office@wykhampark-aspirations.org)  
Web: [wykhampark-aspirations.org](http://wykhampark-aspirations.org)

Miss Sylvia Thomas – Principal of Banbury Aspirations Campus

5 October 2018

Dear Parents / Guardians,

I am writing to inform you of the action plan the Mathematics Department have put in place to ensure your child makes the rapid progress required to maximise their success in the summer exams.

**Your child has been identified as a student who is on the verge of breaking through to the next successful phase and grade of their learning.** We are putting the following compulsory plans in place to ensure we are supporting your child in every way we can:

- Your child must attend weekly after-school revision lessons. These take place every Thursday, 3.30-4.30pm.
- Your child must answer a set of weekly home-learning exam-style questions. These questions will be provided every Friday and collected the following Thursday. They will be uploaded to Show My Homework every week.

### **Our commitment to your child:**

- The Mathematics Department will mark your child's exam questions every week and will give regular verbal feedback in lessons.
- Your child will regularly receive and act on personalised targets to help them improve their exam responses.
- We will deliver high-quality lessons, every lesson.

Please do let me know if you have any questions or concerns at all.

Yours sincerely

Miss Clare Reddan

Head of Mathematics  
@wykhamparkmaths



Aspirations – Company Registration Number: 07867577  
Managing Director: Steve Kenning



Wykhampark  
Academy Banbury



Banbury Aspirations  
Campus Sixth Form



**Wykham Park Academy Banbury**  
an Aspirations Academy



# Aspirations

<b>Topic Paper 1 Foundation</b>	Can I?
Order numbers	
Percentages and problems involving percentage change	
Conversion between fractions, decimals and percentages	
Rounding; Inequality notation to specify error interval	
Conventional geometrical terms and notation	
Apply four operations	
Scale factors, scale diagrams and maps	
Units of mass, length, time, money and other measures (including standard compound measures)	
Theoretical probability; appropriate language; 0-1 probability scale	
Probability outcomes	
Properties of 3D shapes	
Approximation and estimation	
Bar charts	
One quantity as a fraction of another	
Stem and leaf diagrams	
Transformations	
Index notation	
Ratio in real context	
Translate situations or procedures into algebraic expressions, formulae or equations	
Solve two simultaneous equations	
Exterior and interior angles	
Substitute values into formulae and expressions	
Graphs of functions in real contexts	
The nth term of a sequence	

<b>Topic Paper 2 Foundation</b>	Can I?
Percentages and problems involving percentage change	
Roots and powers	
Theoretical probability; appropriate language; 0-1 probability scale	
Conversion between fractions, decimals and percentages	
Frequency tables	
Measures of central tendency (median, mean, mode and modal class)	
Multiplicative relationship between two quantities	
Primes, factors, multiples	
Apply four operations	
Generate terms of a sequence	
The nth term of a sequence	
BIDMAS and inverse operations	
Substitute values into formulae and expressions	
Rearrange formulae to change the subject	
Graphs of functions in real contexts	
Use compound units	
One quantity as a fraction of another	
Proportion as equality of ratios	
Properties of angles	
Solve problems involving direct and inverse proportion	
Line of best fit	
Gradients and intercepts of linear functions	
Rates of change	
Transformations	
Translate situations or procedures into algebraic expressions, formulae or equations	
Enumerate sets and combinations of sets systematically; two-way tables, Venn diagrams and tree diagrams	
Independent and dependent combined events	
Fractions in ratio problems	
Circumference and area of a circle	

<b>Topic Paper 3 Foundation</b>	Can I?
Fractions in ratio problems	
Change between standard units and compound units	
Conversion between fractions, decimals and percentages	
Apply four operations	
Charts and diagrams for ungrouped discrete numerical data:	
Fractions, decimals and percentages as operators	
Pie charts	
Inverse and composite functions; formal function notation	
BIDMAS and inverse operations	
Solve problems involving direct and inverse proportion	
Transformations	
Areas of composite shapes	
Graphs and equations of lines	
Rounding; Inequality notation to specify error interval	
Measures of central tendency (median, mean, mode and modal class)	
Expand expressions	
Factorise expressions	
Solve linear equations	
Simplify and manipulate expressions using laws of indices	
Percentages and problems involving percentage change	
Primes, factors, multiples	
Use compound units	
Constructions and loci	
Relate ratios to fractions and to linear functions	
Theoretical probability; appropriate language; 0-1 probability scale	
Pythagoras's Theorem and Trigonometry	
Growth and decay, compound interest	
Standard form	
Graphs of linear functions	



**Wykham Park Academy Banbury**  
an Aspirations Academy



# Aspirations

<b>Topic Paper 1 Higher</b>	Can I?
Index notation	
Ratio in real context	
Percentages and problems involving percentage change	
Translate situations or procedures into algebraic expressions, formulae or equations	
Solve two simultaneous equations	
Exterior and interior angles	
Standard form	
Measures of central tendency (median, mean, mode and modal class)	
Theoretical probability; appropriate language; 0-1 probability scale	
Cumulative frequency graphs	
Vectors	
Construct and interpret equations that describe inverse proportion	
Solve quadratic inequalities	
Distance-time graphs, velocity-time graphs	
Gradient at a point on a curve as the instantaneous rate of change	
Roots, intercepts, turning points of quadratic functions	
Conditional probability	
Relationships between lengths, areas and volumes in similar figures	
Simplify and manipulate algebraic expressions and fractions	
Translations and reflections of a function	
Calculate exactly with surds	
Exact values of $\sin \theta$ and $\cos \theta$ and $\tan \theta$	

<b>Topic Paper 2 Higher</b>	Can I?
Line of best fit	
Gradients and intercepts of linear functions	
Rates of change	
Transformations	
Translate situations or procedures into algebraic expressions, formulae or equations	
Enumerate sets and combinations of sets systematically; two-way tables, Venn diagrams and tree diagrams	
Independent and dependent combined events	
Substitute values into formulae and expressions	
Fractions in ratio problems	
BIDMAS and inverse operations	
Index notation	
Rearrange formulae to change the subject	
Parallel lines	
Growth and decay, compound interest	
Linear and non-linear sequences of diagrams and numbers	
Multiplicative relationship between two quantities	
Pythagoras's Theorem and Trigonometry	
Listing strategies/Product rule for counting	
Histograms with equal and unequal class intervals	
Simplify and manipulate algebraic expressions and fractions	
Approximate solutions to equations using iteration	
Relationships between lengths, areas and volumes in similar figures	
Mathematical arguments and proofs	
Arc lengths, angles and areas of sectors of circles	
Limits of accuracy; bounds	
Area of triangles, parallelograms, trapezia	
Solve two simultaneous equations	

<b>Topic Paper 3 Higher</b>	Can I?
Primes, factors, multiples	
Use compound units	
Constructions and loci	
Relate ratios to fractions and to linear functions	
Theoretical probability; appropriate language; 0-1 probability scale	
Expand expressions	
Factorise expressions	
Graphs and equations of lines	
Pythagoras's Theorem and Trigonometry	
Rounding; Inequality notation to specify error interval	
Cumulative frequency graphs	
Measures of central tendency (median, mean, mode and modal class)	
Measures of spread (range, including consideration of outliers, quartiles and inter-quartile range)	
Percentages and problems involving percentage change	
Mathematical arguments and proofs	
Recurring decimals and their corresponding fractions	
Solve linear inequalities	
Sampling	
Growth and decay, compound interest	
Graphs of trigonometric functions	
Vectors	
Conditional probability	
Inverse and composite functions; formal function notation	
Equation of a circle	