

MATHS: Year 9 Foundation Course Outline



Half term	TOPIC	CONTENT	Suggestions for enrichment activities (eg: films, websites, books, museums and activity centres)
1	Integers and Place Value	Ordering numbers including negatives, rounding, use all 4 operators	http://nrich.maths.org/2074
	Decimals	Using decimal notation and place value, rounding to decimals and integers	http://nrich.maths.org/1926
	Indices, powers and roots	Square and cube numbers, using index notation, powers of 10 including negatives, use calculators	http://nrich.maths.org/424
OCTOBER HALF TERM HOLIDAY			
2	Factors, multiples and primes	Recognise primes, find common factors and multiples of two numbers	http://nrich.maths.org/704
	Algebra: the basics	Use notation correctly, write expressions, simplify use index laws and notation in algebra	http://nrich.maths.org/2129
	Expanding and factorising single brackets	Use brackets in algebra, factorise expressions	http://nrich.maths.org/6942
CHRISTMAS HOLIDAYS			
3	Expressions and substitution into formulae	Substitute into simple expressions and using negatives, derive simple formula	http://nrich.maths.org/1406
	Tables	Data collection techniques, read frequency values, identify mode	http://nrich.maths.org/6063
	Charts and graphs	Pictograms, bar charts, line graphs, stem and leaf	http://nrich.maths.org/7489
FEBRUARY HALF TERM HOLIDAY			
4	Pie charts	Draw circles and arcs, measure angles, find mode and frequency from Pie charts	https://developers.google.com/chart/
	Scatter graphs	Draw and interpret, draw and use line of best fit, correlation	http://nrich.maths.org/7502
	Fractions	Fractions in diagrams, compare, add and subtract, multiply and divide	http://nrich.maths.org/5777
EASTER HOLIDAYS			
5	Fractions, decimals and percentages	Convert between fractions to decimals, recurring decimals, find equivalents	http://nrich.maths.org/6541
	Percentages	Percent of a quantity, amount of increase/decrease, real-life situations, use multipliers	http://nrich.maths.org/1283
	Equations	Expressions, set up simple equations, solve simple and linear equations, rearrange equations	http://nrich.maths.org/801
MAY HALF TERM HOLIDAY			
6	Inequalities	Number lines, use correct notation	http://nrich.maths.org/1979
	Sequences	n th term for patterns, linear and arithmetic sequences, continue quadratic sequences	http://nrich.maths.org/2086