Knowledge Organiser

Lent Term Set 1 Year 9

Topic				Independent Learning and homework tasks	
				MyMaths	CorbettMaths.com
Solving Simultaneous equations by elimination / substitution				Algebra, Equations – simultaneous, Sim Equations 1, 2 & 3	Video 295, 296
Solving Simultaneous equations graphically				Algebra, Equations – simultaneous, Solving Sim Equs graphically	Video 297
Forming then Solving Simultaneous equations				Algebra, Equations – simultaneous, Sim Equations 1, 2 & 3	Video 295, 296
Multiplying, dividing using indices				Number, Powers and roots, Indices 1	Video 174
Understanding and using negative indices				Number, Powers and roots, Indices 2	Video 175
Understanding and using fractional indices				Number, Powers and roots, Indices 3	Video 173
Writing very large and small numbers in standard form, and vice-versa				Number, Standard Form	Video 300
Performing calculations in standard form				Number, Standard Form	Video 301-3
Simplifying ratio				Number, Ratio & Proportion Intro	Video 271a - d
Sharing quantities in a given ratio				Number, Ratio & Proportion, Ratio dividing 1 & 2	Video 269
Solving problems using unitary method				Number, Ratio & Proportion, Unitary Method	Video 255a
Constructing and interpreting pie charts				Data, Presenting data, Drawing / Interpreting pie charts	Video 163 & 164
Constructing and interpreting frequency polygons				Data, Presenting data, Frequency Polygons	Video 155 & 156

Lent Term 1 Knowledge

Simultaneous equations

Sometimes a pair of equations are said to be simultaneous, this means they can both be written on a graph together. In many cases the lines they form will cross and this is the point where they are said to be simultaneous.

Index laws

$x^n \times x^m = x^{n+m}$	$x^n \div x^m = x^{n-m}$	$(x^n)^m = x^{n \times m}$

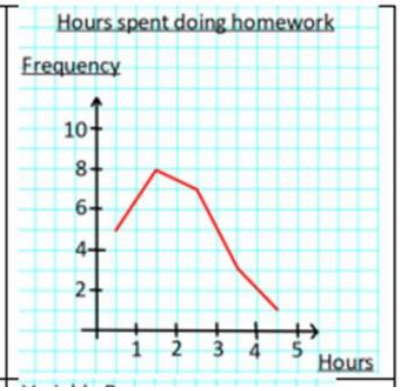
Indices

Repeated multiplication written as an index e.g. $4 \times 4 \times 4 = 4^3$ e.g. $3 \times 3 \times 5 \times 5 \times 5 = 3^2 \times 5^3$

When an index is negative it means the reciprocal of the positive index e.g. $4^{-3} = \frac{1}{4^3}$

Frequency polygon

A line replaces the bars joining the midpoint of the top of each bar.



Maths Support Attend KS3 Maths Clinic every Friday lunch time for extra help and support.

Stretch and Challenge:

1) Practise UKMT Intermediate Maths Challenge Past papers on ukmt.org.uk

2) Set up an account on parallel.org.uk website, using your school email address and use teacher code "ha52kh"

3) Attend Puzzle Club one lunch time each week

Scan for full list of Year 9 Maths facts