Year 8

<table>
<tr><th colspan="2">Autumn Term</th><th colspan="2">Spring Term</th><th colspan="2">Summer Term</th></tr>
<tr>
<td colspan="2">Key knowledge:

<u>Core:</u>
Factors, multiples and primes
Using index laws
Using standard form
Use set notation, Venn diagrams, grids and tables for probability
Calculate with fractions
Half term
Calculate with negative numbers
Use algebraic language
Substitution
Simplify, expand and factorise algebraic expressions
Solve equations
Changing the subject of a formula
Finding the nth term of a sequence

<u>Higher:</u>
Factors, multiples and primes
Using index laws
Using standard form
Use set notation, Venn diagrams, grids and tables for probability
Calculate with fractions
Half term
Calculate with negative numbers
Use algebraic language
Substitution
Simplify, expand and factorise algebraic expressions
Solve equations (including unknowns on both sides)
Changing the subject of a formula
Finding the nth term of a sequence
Introduction to other sequences; geometric, quadratic, fibonacci</td>
<td colspan="2">Key knowledge:

<u>Core:</u>
Use angle rules to find missing angles
Use ruler and compass to perform constructions
Find the area and perimeter of shapes
Half term
Rounding and estimation including significant figures
Calculate percentage of amounts
Use magic multipliers for percentages
Calculate a reverse percentage
Solve problems with ratio

<u>Higher:</u>
Use angle rules to find missing angles
Use ruler and compass to perform constructions
Find the area and perimeter of shapes
Half term
Rounding and estimation including significant figures
Calculate percentage of amounts
Use magic multipliers for percentages
Calculate a reverse percentage
Solve problems with ratio</td>
<td colspan="2">Key knowledge:

<u>Foundation:</u>
Plot points on a graph using coordinates
Draw statistical diagrams
Find averages and the range from a set of data
Find averages and the range from tables, including grouped data
Calculate probability
List outcomes using a sample space diagram
Half term
Calculate compound measures such as speed and density
Construct real life graphs for speed/time
Calculate the volume and surface area of 3D shapes
Introduction to Pythagoras' theorem
Perform transformations, and describe a transformation of shapes

<u>Higher:</u>
Plot points on a graph using coordinates
Draw statistical diagrams
Find averages and the range from a set of data
Find averages and the range from tables, including grouped data
Calculate probability
List outcomes using a sample space diagram
Half term
Calculate compound measures such as speed and density
Construct real life graphs for speed/time
Calculate the volume and surface area of 3D shapes
Solve problems involving surface area and volume of cylinders
Introduction to Pythagoras' theorem
Perform transformations, and describe a transformation of shapes</td>
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<tr>
<td>Pupils will be able to:
Answer problem solving questions on all the topics listed above</td>
<td>Key Attributes for Success:
Learning times tables. Knowing number bonds. Mental arithmetic strategies. Problem solving skills. Reading the question. Asking for help. Setting out work clearly. Showing working out. Self and peer assessment. Correcting work.</td>
<td>Pupils will be able to:
Answer problem solving questions on all the topics listed above</td>
<td>Key Attributes for Success:
Learning times tables. Knowing number bonds. Mental arithmetic strategies. Problem solving skills. Reading the question. Asking for help. Setting out work clearly. Showing working out. Self and peer assessment. Correcting work.</td>
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<td>Key Attributes for Success:
Learning times tables. Knowing number bonds. Mental arithmetic strategies. Problem solving skills. Reading the question. Asking for help. Setting out work clearly. Showing working out. Self and peer assessment. Correcting work.</td>
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<tr>
<td colspan="2">Assessment:
There will be an assessment around half term and just before or just after Christmas on the above topics</td>
<td colspan="2">Assessment:
There will be an assessment around half term and just before or just after Easter on the above topics</td>
<td colspan="2">Assessment:
There will be an assessment around half term and at the end of June on the above topics</td>
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<tr>
<td colspan="2">Enrichment Opportunities:
Math's Club (Tue after school in S10)
Chess club (Tue after school in 2.1)
Times Tables Rock stars (TTRS)</td>
<td colspan="2">Enrichment Opportunities:
Math's Club (Tue after school in S10)
Chess club (Tue after school in 2.1)
Times Tables Rock stars (TTRS)
Junior Maths Challenge</td>
<td colspan="2">Enrichment Opportunities:
Math's Club (Tue after school in S10)
Chess club (Tue after school in 2.1)
Times Tables Rock stars (TTRS)</td>
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