

## Woodpecker Maths - Autumn Term 1&2

<b>Key Stage/Year</b>	Upper KS3
<b>Approximate Number of Lessons and Term</b>	Autumn Term 1 - 24 Autumn Term 2 - 32
<b>Qualification/Exam (if applicable)</b>	Preparation for GCSE Foundation Maths

<b>Consideration of prior learning</b>	Work following SOW for Toucans for previous academic year, potential subject knowledge delivered at Lower KS3 NC Maths from other settings.
<b>How will learners' knowledge, skills and understanding be checked at the start of the unit?</b>	Times Table Rock Stars times table tests General testing of skills in arithmetic Level of support and processing time required by each individual

<b>How will learners' knowledge, skills and understanding be checked at the end of the unit?</b>	Assessment tests covering topics covered in both terms and scores entered into Academic Tracker
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Learning Outcome	Approx. No. of Lessons	Potential Activities	Behaviour/Safety/Personal Development/SMSC Opportunities
Solving problems with addition and subtraction	8	Properties of addition and subtraction Formal methods of + and - for integers Formal method of + and - for decimals Mental strategies Non calculator and calculator methods and ways of recording Chrome book practise using My Maths activities	Real life maths Personal finances Different cultural ways of demonstrating + and - Gambling Individual, pair and group work
Solving problems with multiplication	12	Properties of multiplication and division Factors Multiples Powers of 10 Multiply and divide by powers of 10 using place value chart Formal method of $\times$ & $\div$ for integers Formal method of $\times$ & $\div$ for decimals Understand order of operations	Different cultural versions of multiplication - lattice or chinese method Money and metric conversions
Addition and subtraction of fractions	4	Representations of fractions Convert between mixed numbers and improper fractions Unit fractions Add and subtract fractions with same denominator	Pizzas/chocolate bars Sales in shops
Directed numbers	8	'Negative' numbers Order numbers Use inequality signs to compare numbers	Temperature Credit and debit Scientific uses

		Perform calculations that cross zero +, - , x & ÷ of directed number	
Fractions & percentages of amounts	4	Fraction of an a amount Use fraction to find whole Percentage using mental methods -10%, 50% etc Percentage using a calculator	Pay Discount Relationship between parts of wholes
Multiplying and dividing fractions	8	Multiply fraction by an integer Find the product of unit fractions Find the product of any pair if fractions Divide integer by fraction Divide fraction by unit fraction Understand term reciprocal Divide any pair of fractions	
Sequences	8	Describe and continue sequences Predict next term Use of tables and graphs Linear and non linear sequences Continue linear and non linear sequences Explain term to term rule	Real life situations Nature patterns Shapes of graphs relating to numbers
Cartesian plane	4	Coordinates and axes Four quadrants Lines parallel to the axes Recognise and use the line $y=x$	Graphs in magazines and newspapers Jobs using diagrams
Autumn Assessment			


<p><b>Possible Adaptations for Higher and Lower Achievers</b></p>	<p>Higher achievers - larger and more complex numbers, worded problems, creating their own questions for partner to solve, development of checking strategies            Lower achievers - Sums set out more clearly and spaced more widely, scaffolding provided in terms of step by step approach, creating question for an answer provided to promote thinking</p>
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