

## FUNCTIONAL SKILLS MATHS SOW

Throughout each of the topics there will be regular practise of exam style questions to use and apply knowledge.

TERM	TOPIC	FUNCTIONAL 1	FUNCTIONAL 2
AUTUMN 1 7 weeks	Properties of number (4 weeks)	<p>1 Read, write, order and compare large numbers (up to one million)</p> <p>2 Recognise and use positive and negative numbers</p> <p>10 Read, write, order and compare decimals up to three decimal places</p> <p>12 Approximate by rounding to a whole number or to one or two decimal places</p>	<p>1 Read, write, order and compare positive and negative numbers of any size</p> <p>9 Order, approximate and compare decimals</p>
	Shape (3 weeks - continue Autumn 2)	<p>23 Calculate the volumes of cubes and cuboids</p> <p>24 Draw 2-D shapes and demonstrate an understanding of line symmetry and knowledge of the relative size of angles</p> <p>25 Interpret plans, elevations and nets of simple 3-D shapes</p>	<p>17 Use formulae to find volumes and surface areas of 3-D shapes including cylinders (formulae to be given for 3-D shapes other than cylinders)</p> <p>20 Understand and use common 2-D representations of 3-D objects</p> <p>21 Draw 3-D shapes to include plans and elevations</p>
AUTUMN 2	Shape (2 weeks)	21 Recognise and make use of simple scales on maps and drawings	16 Calculate perimeters and areas of 2-D shapes including triangles and circles and

7 weeks		<p>22 Calculate the area and perimeter of simple shapes including those that are made up of a combination of rectangles</p> <p>26 Use angles when describing position and direction, and measure angles in degrees</p>	<p>composite shapes including non-rectangular shapes (formulae given except for triangles and circles)</p> <p>19 Use coordinates in 2-D, positive and negative, to specify the positions of points</p> <p>18 Calculate actual dimensions from scale drawings and create a scale diagram given actual measurements</p> <p>22 Calculate values of angles and/or coordinates with 2-D and 3-D shapes</p>
	Money (4 weeks)	<p>18 Calculate simple interest in multiples of 5% on amounts of money</p> <p>19 Calculate discounts in multiples of 5% on amounts of money</p> <p>Convert between units of length, weight, capacity, <b>money</b> and time, in the same system</p>	<p>13 Calculate amounts of money, compound interest, percentage increases, decreases and discounts including tax and simple budgeting</p> <p>15 Calculate using compound measures including speed, density and <b>rates of pay</b></p>
	Time (1 week - continue Spring 1)	Convert between units of length, weight, capacity, money and <b>time</b> , in the same system	
SPRING 1 6 weeks	Time (3 weeks)	Convert between units of length, weight, capacity, money and time, in the same system	
	The 4 operations	3 Multiply and divide whole numbers and decimals by 10, 100, 1000	2 Carry out calculations with numbers up to one million including strategies to check

		<p>4 Use multiplication facts and make connections with division facts</p> <p>5 Use simple formulae expressed in words for one or two-step operations</p> <p>6 Calculate the squares of one-digit and two-digit numbers</p> <p>7 Follow the order of precedence of operators</p> <p>11 Add, subtract, multiply and divide decimals up to two decimal places</p>	<p>answers including estimation and approximation</p> <p>3 Evaluate expressions and make substitutions in given formulae in words and symbols</p> <p>10 Add, subtract, multiply and divide decimals up to three decimal places</p> <p>12 Follow the order of precedence of operators, including indices</p>
<p>SPRING 2</p> <p>6 weeks</p>	<p>Ratio and fractions (4 weeks)</p>	<p>Read, write, order and compare common fractions and mixed numbers</p> <p>9 Find fractions of whole number quantities or measurements</p> <p>10 Read, write, order and compare decimals up to three decimal places</p> <p>11 Add, subtract, multiply and divide decimals up to two decimal places</p> <p>13 Read, write, order and compare percentages in whole numbers</p> <p>14 Calculate percentages of quantities, including simple percentage increases and decreases by 5% and multiples thereof</p>	<p>4 Identify and know the equivalence between fractions, decimals and percentages</p> <p>5 Work out percentages of amounts and express one amount as a percentage of another</p> <p>6 Calculate percentage change (any size increase and decrease), and original value after percentage change</p> <p>8 Express one number as a fraction of another</p> <p>11 Understand and calculate using ratios, direct proportion and inverse proportion</p>

		15 Estimate answers to calculations using fractions and decimals	
	Measure (2 weeks - continue In Summer 1)	Convert between units of length, weight, capacity, money and time, in the same system	7 Order, add, subtract and compare amounts or quantities using proper and improper fractions and mixed numbers  14 Convert between metric and imperial units of length, weight and capacity using a) a conversion factor and b) a conversion graph
SUMMER 1  6 weeks	Measures (2 weeks)	21 Recognise and make use of simple scales on maps and drawings  22 Calculate the area and perimeter of simple shapes including those that are made up of a combination of rectangles	18 Calculate actual dimensions from scale drawings and create a scale diagram given actual measurements  16 Calculate perimeters and areas of 2-D shapes including triangles and circles and composite shapes including non-rectangular shapes (formulae given except for triangles and circles)  15 Calculate using compound measures including speed, density and rates of pay
	Data (4 weeks)	27 Represent discrete data in tables, diagrams and charts including pie charts, bar charts and line graphs  28 Group discrete data and represent grouped data graphically  29 Find the mean and range of a set of	23 Calculate the median and mode of a set of quantities 24 Estimate the mean of a grouped frequency distribution from discrete data  25 Use the mean, median, mode and range to compare two sets of data  26 Work out the probability of combined events including the use of diagrams and

		<p>quantities</p> <p>30 Understand probability on a scale from 0 (impossible) to 1 (certain) and use probabilities to compare the likelihood of events</p> <p>31 Use equally likely outcomes to find the probabilities of simple events and express them as fractions</p>	<p>tables, including two-way tables</p> <p>27 Express probabilities as fractions, decimals and percentages</p> <p>28 Draw and interpret scatter diagrams and recognise positive and negative correlation</p>
SUMMER 2	<p>During summer 2 pupils will complete the following at a level suitable to the individual:</p> <ul style="list-style-type: none"> <li>● Exam practice (functional skills pupils)</li> <li>● Problem solving activities</li> <li>● Lifeskills based maths eg, budgeting, bank accounts, tax etc</li> </ul>		