

Spring 1: Treasures of Ancient Egypt

Week	Unit	National Curriculum objectives Possible lesson objectives	White Rose Maths (WRM) 'small steps'	Models and images representing number Key vocabulary	Reasoning (in addition to WRM questions)	Fluency
1	Number Calculation: Multiplication and division (2)	<ul style="list-style-type: none"> write and calculate mathematical statements for multiplication using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods solve problems, including missing number problems, involving multiplication, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects. <p>WALT use a column method to multiply WALT carry out column multiplication with one exchange WALT carry out column multiplication with more than one exchange WALT scale up WALT use multiplication to find all possible combinations</p>	<ul style="list-style-type: none"> Multiply 2-digits by 1-digit (1) Multiply 2-digits by 1-digit (2) Scaling How many ways? 	Base-10, place value grid, place value counters, column layout, bar model, cubes	NRICH What's in the Box? Size of an answer Will the answer to the following calculations be greater or less than 80? $23 \times 3 =$ $32 \times 3 =$ $42 \times 3 =$ $36 \times 2 =$ How close can you get? $\begin{array}{r} _ _ \times _ _ \\ \hline \end{array}$ Using the digits 2, 3 and 4 in the calculation above how close can you get to 100? What is the largest product? What is the smallest product? Missing digit Carry out a column multiplication. Write the completed column multiplication out for your partner – but with one (or more) of the starting digits missing. Can they find it/them?	Counting in 10s, 50s and 100s Number facts: ten times table and division
2		<ul style="list-style-type: none"> write and calculate mathematical statements for division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods solve problems, including missing number problems, involving multiplication and division <p>WALT use a part-whole model to divide</p>	<ul style="list-style-type: none"> Divide 2-digits by 1-digit (1) Divide 2-digits by 1-digit (2) Divide 2-digits by 1-digit (3) 	Place value grid, place value counters, part-whole model, empty numberline	Use the inverse Use the inverse to check if the following calculations are correct $23 \times 4 = 82$ $117 \div 9 = 14$ Prove it Calculating division by sharing or by repeated subtraction will always give you the same answer.	Multiples of 10 or 100 more or less Number facts: bonds to 10 and 20 and matching subtraction

	WALT divide with an exchange WALT use repeated subtraction to divide WALT divide with a remainder			Spot the Mistake I think that $72 \div 3 = 204$. What have I done wrong?	
3	Measurement Money				
	<ul style="list-style-type: none"> add and subtract amounts of money to give change, using both £ and p in practical contexts <p>WALT count in pounds and pence WALT convert between pounds and pence WALT add amounts of money WALT subtract amounts of money WALT subtract to calculate change</p>	<ul style="list-style-type: none"> Count money (pence) (<i>WRM revision</i>) Count money (pounds) (<i>WRM revision</i>) Pounds and pence Convert pounds and pence Add money Subtract money Give change 	Coins and notes, bar model, part-whole model, empty numberline	<p>Always, sometimes, never Possibilities Notes are worth more than coins I bought a book which cost between £9 and £10 and I paid with a ten pound note. My change was between 50p and £1 and was all in silver coins. What price could I have paid? Working backwards I bought a toy train and a toy horse with a note and received one 50p coin as change. The train cost twice as much as the horse. How much did they each cost? Which note did I pay with? Is there more than one answer? NRICH How Much Did it Cost?</p>	<p>Bonds to 1000</p> <p>Number facts: three times table and division</p>
4	Statistics				
	<ul style="list-style-type: none"> interpret and present data using bar charts [and] pictograms solve one-step and two-step questions [for example, 'How many more?' and 'How many fewer?'] using information presented in scaled bar charts and pictograms <p>WALT ask a question and collect data to answer it WALT use a scale when drawing and interpreting pictograms WALT use pictogram to solve one- or two-step problems WALT represent data in a bar chart, using a scale WALT interpret a bar chart with a scale</p>	<ul style="list-style-type: none"> Make tally charts (<i>WRM revision</i>) Draw pictograms (2, 5 and 10) (<i>WRM revision</i>) Interpret pictograms (2, 5 and 10) (<i>WRM revision</i>) Pictograms Bar charts 	-	<p>True or false? (Looking at a bar chart) "Twice as many people like strawberry than lime". Is this true or false? Convince me. Make up your own 'true/false' statement about the bar chart Odd one out Three statements about data in a bar chart or pictogram, one of which can't be answered from the chart, e.g. How many more x than y? Which has the most? What did z have for breakfast?!! NRICH If the World Were a Village (or following week)</p>	<p>Money calculations</p> <p>Number facts: four times table and division</p>
5	<ul style="list-style-type: none"> interpret and present data using bar charts and tables 	<ul style="list-style-type: none"> Bar charts Tables 	NB This week is an opportunity to practise	What's the same, what's different? Pupils identify similarities and differences	Bonds to multiples of 10 and multiples of 100

	<ul style="list-style-type: none"> • solve one-step and two-step questions [for example, ‘How many more?’ and ‘How many fewer?'] using information presented in scaled bar charts and tables <p>WALT choose between different ways of representing data WALT interpret information in a table with more than one column of data WALT calculate to answer questions about data</p>		<i>calculation skills in the context of interpreting data</i>	<p>between different representations and explain them to each other</p> <p>Possibilities What could this (unlabelled) table or bar chart be showing? Why do you think that?</p> <p>NRICH Real Statistics NRICH The Domesday Project</p>	<p>Number facts: eight times table</p>
6	<p>Measurement Length and perimeter (I)</p>				
	<ul style="list-style-type: none"> • measure, compare, add and subtract lengths (m/cm/mm) <p>WAP measuring lengths in m and cm WALT convert between units of length WALT compare lengths WALT add and subtract lengths</p>	<ul style="list-style-type: none"> • Measure length • Measure length (m) (WRM revision) • Equivalent lengths – m and cm • Equivalent lengths – mm and cm • Compare lengths (WRM revision) • Compare lengths • Add lengths • Subtract lengths 	<p>Bar model, part-whole model, numberline</p>	<p>Odd one out 1000 mm 1 m 1000 cm 100 cm</p> <p>Top tips Put these measurements in order starting with the largest. Half a metre Quarter of a metre 30 cm 600 mm Explain your thinking NRICH Olympic Starters</p>	<p>Telling the time to the hour, half hour and quarter hour</p> <p>Number facts: eight times table division</p>