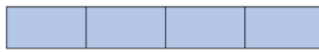









# Captain Webb Primary School medium term plan

Year 6

Spring 1	Strand	Number of weeks	Ready to Progress (Based on National Curriculum objectives)	Key areas of knowledge (small steps in learning)	Resources and methods (Calculation policy)																																																																																																					
	Decimals	2	<ul style="list-style-type: none"><li>Knows how to identify the value of each digit in numbers given to 3dp.</li><li>Multiply and divide numbers by 10, 100 and 1000 giving answers up to 3dp.</li><li>Multiply and divide 1 and 2 digit whole numbers by numbers with up to 2dp.</li><li>Knows how to round decimals to a specified degree of accuracy.</li></ul>	<ul style="list-style-type: none"><li>I know the value of digits in a number with up to 3 decimal places</li><li>I know how to order and compare numbers with up to 3 decimal places</li><li>I know how to count up and down in decimals and fractions including bridging through 0 on a number line</li><li>I know how to round decimals to a required degree of accuracy</li><li>I know how to solve problems that require rounding to a specific degree of accuracy</li><li>I know how to add and subtract decimals</li><li>I know how to multiply one-digit numbers with up to two decimal places by whole numbers</li><li>I know how to multiply and divide numbers by 10, 100 and 1,000</li></ul>	<table><tr><th>1,000</th><th>100</th><th>10</th><th>1</th><th>.</th><th>0.1</th><th>0.01</th></tr><tr><td>thousands</td><td>hundreds</td><td>tens</td><td>ones</td><td>decimal point</td><td>tenths</td><td>hundredths</td></tr><tr><td></td><td></td><td></td><td></td><td>.</td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td>.</td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td>.</td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td>.</td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td>.</td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td>.</td><td></td><td></td></tr></table> <table><tr><th colspan="3">Ones</th><th colspan="3">Tenths</th><th colspan="3">Hundredths</th></tr><tr><td>1</td><td>1</td><td>1</td><td>0.1</td><td>0.1</td><td>0.1</td><td>0.01</td><td>0.01</td><td>0.01</td></tr><tr><td>1</td><td>1</td><td>1</td><td>0.1</td><td>0.1</td><td>0.1</td><td>0.01</td><td>0.01</td><td>0.01</td></tr><tr><td></td><td></td><td></td><td>0.1</td><td>0.1</td><td>0.1</td><td>0.01</td><td>0.01</td><td></td></tr><tr><td></td><td></td><td></td><td>0.1</td><td>0.1</td><td>0.1</td><td></td><td></td><td></td></tr></table> <p>A box of chocolates costs 4 times as much as a chocolate bar. Together they cost £7.55</p> <div></div> <div></div> <p>How much does each item cost? How much more does the box of chocolates cost?</p> <p>£7.55</p>	1,000	100	10	1	.	0.1	0.01	thousands	hundreds	tens	ones	decimal point	tenths	hundredths					.							.							.							.							.							.			Ones			Tenths			Hundredths			1	1	1	0.1	0.1	0.1	0.01	0.01	0.01	1	1	1	0.1	0.1	0.1	0.01	0.01	0.01				0.1	0.1	0.1	0.01	0.01					0.1	0.1	0.1			
1,000	100	10	1	.	0.1	0.01																																																																																																				
thousands	hundreds	tens	ones	decimal point	tenths	hundredths																																																																																																				
				.																																																																																																						
				.																																																																																																						
				.																																																																																																						
				.																																																																																																						
				.																																																																																																						
				.																																																																																																						
Ones			Tenths			Hundredths																																																																																																				
1	1	1	0.1	0.1	0.1	0.01	0.01	0.01																																																																																																		
1	1	1	0.1	0.1	0.1	0.01	0.01	0.01																																																																																																		
			0.1	0.1	0.1	0.01	0.01																																																																																																			
			0.1	0.1	0.1																																																																																																					

				<ul style="list-style-type: none"> <li>I know how to use written division methods in cases where the answer had up to two decimal places</li> </ul>	
	Fractions: x and /	2	<ul style="list-style-type: none"> <li>Knows how to multiply pairs of proper fractions writing the answer in its simplest form.</li> <li>Knows how to divide proper fractions by whole numbers.</li> </ul>	<ul style="list-style-type: none"> <li>I know how to multiply a fraction by an integer</li> <li>I know how to multiply two fractions, writing the answer in the simplest form</li> <li>I know how to divide a fraction by a whole number</li> <li>I know how to answer fraction calculations using BIDMAS</li> <li>I know how to find a fraction of an amount</li> </ul>	 $\frac{1}{2} \times \frac{2}{3} = \frac{2}{6} = \frac{1}{3}$ <p>Use the bar model to find the missing numbers.</p>  $\frac{1}{8}$ of 160 = _____ $\frac{5}{8}$ of 160 = _____    _____ of 160 = 60
	Long division	1	<ul style="list-style-type: none"> <li>Knows the efficient written algorithms for long division</li> <li>Knows the formal written method of long division</li> </ul> <p>Knows how to interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context</p>	<ul style="list-style-type: none"> <li>I know how to use the formal method for long division</li> </ul>	$\begin{array}{r} 543 \\ 24 \overline{) 13032} \\ \underline{-120} \phantom{0} \\ 103 \phantom{0} \\ \underline{-96} \phantom{0} \\ 72 \\ \underline{-72} \\ 0 \end{array}$ 1 - 24 2 - 48 3 - 72 4 - 96 5 - 120 6 - 144 7 - 168 8 - 192 9 - 216


### Problem solving and Reasoning

Spring 1	Strand	Number of lessons	Ready to Progress (Based on National Curriculum objectives)	Key areas of knowledge (small steps in learning)	Resources and methods
	Patterns and rules	2	<ul style="list-style-type: none"> <li>I know what a repeating pattern is and can predict sequences.</li> <li>I know how to apply a rule including more than one step.</li> <li>I know when the rule increases or decreases or is incremental.</li> </ul>	<ul style="list-style-type: none"> <li></li> </ul>	

		<ul style="list-style-type: none"> <li>• I know how to apply inverse relationships and reverse strategies.</li> <li>• I know how to describe rules mathematically using signs and symbols including expressions.</li> </ul>		
--	--	---	--	--

### The candle problem

Mrs Gillespie is 73 today. She has had a birthday cake and candles every year since she was born.



How many candles has she blown out in her lifetime?

21

The numbers in this sequence increase by the same amount each time.

Write the missing numbers.

1

$1\frac{5}{8}$

$2\frac{1}{4}$

17

$x + 2y = 20$

$x$  and  $y$  are whole numbers less than 10

What could  $x$  and  $y$  be?

$x =$

$y =$

23

Here is a pattern of number pairs.

$a$	$b$
1	9
2	19
3	29
4	39

Complete the rule for the number pattern.

$b =$    $\times a -$

1 mark