Subject	Maths		**Term**	Autumn

Area	What I should already be able to do	What I will be able to do by the end of term	Number facts I must know
Numbers and the Number System	• Recognise the place value of each digit in a **two-digit number** (tens, ones) • Read and write numbers to **at least 100** in numerals and in words	• Recognise the place value of each digit in a **three-digit number** (hundreds, tens, ones) • Read and write numbers **up to 1000** in numerals and in words	**Addition facts** Within 10 and 20 e.g. 3 + 5 = 8; 6 + 4 = 10; 7 + 8 = 15; 12 + 6 = 18; 15 + 5 = 20
Counting and Comparing	• Compare and order numbers **from 0 up to 100**; use <, > and = signs • Count in steps of **2, 3, and 5** from 0, and in **10s** from any number, forward and backward	• Compare and order numbers **up to 1000** • Count from 0 in multiples of **4, 8, 50 and 100**; find **10 or 100** more or less than a given number	
Visualising and Constructing	• Identify and describe the properties of 2-D and 3-D shapes • Identify 2-D shapes on the surface of 3-D shapes.	• Identify horizontal and vertical lines and pairs of perpendicular and parallel lines • Draw 2-D shapes and make 3-D shapes using modelling materials; recognise 3-d shapes in different orientations and describe them	**Subtraction facts** Within 10 and 20 e.g. 8 − 5 = 3; 10 − 6 = 4; 15 − 7 = 8; 18 − 12 = 6; 20 − 5 = 15
Calculating: Addition and Subtraction	• Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100 • Add and subtract numbers using concrete objects, pictorial representations, and mentally, including: a **two-digit number** and ones; a **two-digit number** and 10s; 2 two-digit numbers; 3 one-digit numbers • Know that addition of 2 numbers can be done in any order (commutative) and subtraction of 1 number from another cannot • Recognise the inverse relationship between addition and subtraction	• Add and subtract numbers mentally, including: a **three-digit number** and ones; a **three-digit number** and tens; a **three-digit number** and hundreds • Add and subtract numbers with **up to three digits**, using **formal written methods** of columnar addition and subtraction • Estimate the answer to a calculation and use inverse operations to check answers	**Multiplication facts** 2, 5 and 10 x tables New: 3, 4 and 8 x tables e.g. 8 x 3 = 24
Calculating: Multiplication and Division	• Recall and use multiplication and division facts for the **2, 5 and 10** multiplication tables • Calculate mathematical statements for multiplication and division **within the multiplication tables**. • Show that multiplication of 2 numbers can be done in any order (commutative) and division of 1 number by another cannot	• Recall and use multiplication and division facts for the **3, 4 and 8** multiplication tables • Write and calculate mathematical statements for multiplication and 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	**Division facts** 2, 5 and 10 x tables New: 3, 4 and 8 x tables e.g. 24 ÷ 3 = 8

Key calculation methods I will use

Written

Column addition

	7	8	6
+	1	2	5
	9	1	1
		₁	₁

Column Subtraction

	⁶7	¹¹2	¹6
-		4	2	8
		2	9	8

Grid Multiplication

x	3	
70	210	
7	0	2	1	0
4		1	2
=	2	2	2

Vocabulary: exchange, exchange digit, ones, tens, hundreds.
For example:
In column addition, when we add 6 ones to 5 ones, we write the **exchange digit** 1 under the tens column.
In column subtraction, we **exchange** one ten for ten **ones** to make 16 ones.
In gird multiplication, we multiply 7 **tens** by 3 to give 21 **tens**

Models and images that will be used to support my understanding

Dienes

Place Value Counters

100	10	1
100	10	
	10	

Number lines

97 + 8

97   100   105

202 - 6

196   200   202

Bar models

18 + 6 = 24

24	
18	6

Arrays

3 x 5 = 5 x 3 = 15