Unit 1 Number -

Number & place value

Addition & Properties subtraction of shape

Geometry -

Unit 5

Number -

Number &

place value

Addition & subtraction including Measurement

(money)

Geometry -

Properties of shape

Unit 9

Number -

Number &

place value

Addition & subtraction

Properties of shape

Geometry -

Unit 2

Number -

(mass)

Multiplication Fractions

including Number & place value

& division

Measurement

Number -Multiplication

& division including Number &

place value

Fractions

Unit 6

Measurement

(length)

Statistics

Unit 10

Number -

Multiplication Fractions & division

Measurement (volume & capacity)

Unit 3

Number -

Geometry -

Addition & subtraction

Addition & subtraction

Properties of shape

Number -

Addition & subtraction

Addition & subtraction including

Unit 7

Measurement (money)

Unit 8

Number -

Unit II

subtraction

Number -

Addition & Addition &

subtraction including

Measurement (money)

Measurement

(time)

Unit 4

Number -

Multiplication

& division

including

Number &

place value

Multiplication & division including

Number & place value Measurement (time)

Multiplication & divison including Number &

place value

Measurement (perimeter) Fractions

Number -

Statistics

Unit 12

Multiplication & divison

Multiplication & divison

18

Number – Number and place value Unit 1 Number – Addition and subtraction Geometry – Properties of shape		
National Curriculum attainment targets Pupils should be taught to:	Lesson objectives Pupils will be taught to:	Lesson
Number – Number and place value	Week 1	
 recognise the place value of each digit in a three-digit number (hundreds, tens, ones) compare and order numbers up to 1000 	Consolidate recognising the place value of each digit in a two-digit number (tens, ones) Represent numbers using Base 10 material	1
 read and write numbers up to 1000 in numerals solve number problems and practical problems involving 	Consolidate partitioning two-digit numbers in varied ways Represent numbers using Base 10 material	2
these ideas	Recognise the place of value of each digit in a three-digit number (hundreds, tens, ones) Represent numbers using Base 10 material Read and write numbers up to 1000 in numerals	3
	Compare and order numbers up to 1000 Solve number problems and reason mathematically	4
Number – Addition and subtraction	Week 2	
practise solving varied addition and subtraction	Add mentally two, two-digit numbers	1
questions. For mental calculations with two-digit numbers, the answers could exceed 100. *	Add mentally a three-digit number and ones Add mentally a three-digit number and tens	2
 add and subtract numbers mentally, including: a three-digit number and ones 	Subtract mentally two, two-digit numbers	3
- a three-digit number and tens	Subtract mentally a three-digit number and ones Subtract mentally a three-digit number and tens	4
Geometry – Properties of shape	Week 3	
 make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them 	Recognise and name 3-D shapes lying in any position	1
	Make models of 3-D shapes using straws and 2-D shapes	2
	Use properties to classify and describe 3-D shapes	3
	Build 3-D shapes with cubes	4

Number – Multiplication and division, including Unit 2 Number – Fractions Measurement (mass)	g Number and place value	
National Curriculum attainment targets Pupils should be taught to:	Lesson objectives Pupils will be taught to:	Lesson
Number – Multiplication and division	Week 1	
recall and use multiplication and division facts for the 3 multiplication table	 Count on and back in multiples of 2, 3, 5 and 10 Find 10 more or less than a given number 	1
solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects	 Consolidate multiplication and division facts for the 2, 5 and 10 multiplication tables Solve problems involving multiplication and division facts of the 2, 5 and 10 multiplication tables and reason mathematically 	2
Number – Number and place value	Recall the multiplication and division facts for the 3 multiplication table Understand that multiplication can be done in any order	3
• find 10 more or less than a given number	 Use known number facts and place value to derive multiplication facts for the 2, 3 and 5 multiplication tables involving multiples of 10, e.g. 40 x 3 = 120 Solve problems involving multiplication and division facts of the 3 multiplication table and reason mathematically 	4
Number – Fractions	Week 2	
• recognise, find and write fractions of a discrete set of	Recognise, find and write unit fractions of a set of objects	1
objects: unit fractions and non-unit fractions with small denominators	Recognise, find and write unit fractions of a set of objects Solve fraction problems and reason mathematically	2
 add fractions with the same denominator within one whole [for example, ⁵/₂ + ¹/₇ = ⁶/₇] solve problems that involve all of the above 	 Recognise, find and write non-unit fractions of a set of objects Solve fraction problems and reason mathematically 	3
solve problems that involve all of the above	Add fractions with the same denominator	4
Measurement (mass)	Week 3	
measure, compare, add and subtract mass (kg/g)	• Know the equivalent of $\frac{1}{2}$, $\frac{1}{4}$ and $\frac{3}{4}$ of 1 kilogram in grams	1
	Read scales marked in kilograms and in grams	2
	Measure and compare mass; use simple scaling of quantities and equivalents of mixed units	3
	Add and subtract mass using mixed units	4

^{*} Notes and guidance (non-statutory)

Unit 3 Number – Addition and subtraction Geometry – Properties of shape		
National Curriculum attainment targets Pupils should be taught to:	Lesson objectives Pupils will be taught to:	Lesson
Number – Addition and subtraction	Week 1	
 add and subtract numbers mentally, including: a three-digit number and ones 	Add mentally a three-digit number and ones Solve missing number problems	1
 a three-digit number and tens a three-digit number and hundreds 	Add mentally a three-digit number and tens Solve missing number problems	2
 solve problems, including missing number problems, using number facts, place value, and more complex 	Add mentally a three-digit number and hundreds	3
addition and subtraction	Solve problems and reason mathematically	4
	Week 2	
	Subtract mentally a three-digit number and ones Solve missing number problems	1
	Subtract mentally a three-digit number and tens Solve missing number problems	2
	Subtract mentally a three-digit number and hundreds	3
	Solve problems and reason mathematically	4
Geometry – Properties of shape	Week 3	
• recognise angles as a property of shape or a description	Identify right angles in 2-D shapes	1
identify right angles, recognise that two right angles make a half-turn, three make three quarters of a turn	Make and describe right-angled turns	2
	Give and follow directions to make turns	3
and four a complete turn; identify whether angles are greater than or less than a right angle	Test whether angles are greater than or less than a right angle	4

Unit 4 Number – Multiplication and division, including N Measurement (time)	umber and place value	
National Curriculum attainment targets Pupils should be taught to:	Lesson objectives Pupils will be taught to:	Lesson
Number - Multiplication and division	Week 1	
• recall and use multiplication and division facts for the 4 and	Count on and back in multiples of 4	1
8 multiplication tables	• Recall the multiplication and division facts for the 4 multiplication table	2
 solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects Number – Number and place value 	 Use doubling to recall the multiplication facts for the 4 multiplication table Use known number facts and place value to derive multiplication facts for the 4 multiplication table involving multiples of 10, e.g. 30 x 4 = 120 	3
• count from 0 in multiples of 4 and 8	Understand that division is the inverse of multiplication and vice versa Say or write a division statement corresponding to a given multiplication statement involving all known multiplication tables	4
	Week 2	
	Count on and back in multiples of 8	1
	• Recall the multiplication and division facts for the 8 multiplication table	2
	 Use doubling to recall the multiplication facts for the 8 multiplication table Use known number facts and place value to derive multiplication facts for the 8 multiplication table involving multiples of 10, e.g. 30 x 8 = 240 	3
	• Solve problems involving multiplication and division facts for the 4 and 8 multiplication tables and reason mathematically	4
Measurement (time)	Week 3	
 tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks estimate and read time with increasing accuracy to the nearest minute; use vocabulary such as o'clock, a.m./p.m., morning, afternoon, noon and midnight 	• Tell and write the time to the nearest minute on a 12-hour clock with hands	1
	Use a time line and read vocabulary related to time	2
	Read time to the nearest minute on a 12-hour clock with Roman numerals and on a 24-hour clock	3
morning, arctinoon, noon and midnight	Estimate and measure time to the nearest minute	4

Number – Number and place value Unit 5 Number – Addition and subtraction, including I Geometry – Properties of shape	Measurement (money)	
National Curriculum attainment targets Pupils should be taught to:	Lesson objectives Pupils will be taught to:	Lesson
Number – Number and place value	Week 1	
 recognise the place value of each digit in a three-digit number (hundreds, tens, ones) compare and order numbers up to 1000 	Recognise the place value of each digit in a three-digit number (hundreds, tens, ones) Represent numbers using Base 10 material	1
• identify, represent and estimate numbers using different	Compare and order numbers up to 1000	2
representations • read and write numbers up to 1000 in numerals and in words • solve number problems and practical problems involving these ideas	Compare and order numbers up to 1000 Read and write numbers up to 1000 in numerals and in words Represent and estimate numbers using money	3
	Compare and order numbers up to 1000 Solve number problems and reason mathematically	4
Number - Addition and subtraction	Week 2	
• solve problems, including missing number problems,	Add amounts of money	1
using number facts, place value, and more complex addition and subtraction	Subtract amounts of money to give change	2
addition and subtraction	Add and subtract amounts of money	3
Measurement (money)	Solve problems involving money and reason mathematically	4
 add and subtract amounts of money to give change, using both £ and p in practical contexts 		
Geometry – Properties of shape	Week 3	
 draw 2-D shapes and describe them 	Draw and name 2-D shapes	1
 recognise angles as a property of shape 	Make shapes that match a property	2
	Create 2-D shapes using folding and cutting	3
	Describe the properties of 2-D shapes	4

Number – Multiplication and division, including Unit 6 Number – Fractions Measurement (length)	g Number and place value	
National Curriculum attainment targets Pupils should be taught to:	Lesson objectives Pupils will be taught to:	Lesson
Number – Multiplication and division	Week 1	
recall and use multiplication and division facts for the 4 and 8 multiplication tables	Count on and back in multiples of 2, 4 and 8	1
solve problems, including missing number problems,	Use halving to recall the division facts for the 4 multiplication table	2
involving multiplication and division, including positive integer scaling problems and correspondence problems	Use halving to recall the division facts for the 8 multiplication table	3
in which n objects are connected to m objects	Solve problems and reason mathematically	4
Number – Number and place value		
• count from 0 in multiples of 4 and 8		
Number – Fractions	Week 2	
recognise, find and write fractions of a discrete set of objects: unit and non-unit fractions with small	Recognise, find and write unit fractions of a set of objects Solve fraction problems and reason mathematically	1
denominators • recognise and use fractions as numbers: unit and non- unit fractions with small denominators	Recognise, find and write non-unit fractions of a set of objects Solve fraction problems and reason mathematically	2
compare and order unit fractions, and fractions with the same denominator	Compare and order unit fractions, and fractions with the same denominator	3
• solve problems that involve all of the above	Recognise fractions as numbers	4
Measurement (length)	Week 3	
• measure, compare, add and subtract lengths	Use a ruler to draw and measure lines to the nearest centimetre	1
(m/cm/mm)	Use a ruler to draw and measure lines to the nearest millimetre	2
	Use rulers to measure and compare lengths; use simple scaling of quantities and equivalents of mixed units	3
	Add and subtract length using mixed units	4

Unit 7 Number – Addition and subtraction, including Mea Statistics	surement (money)	
National Curriculum attainment targets Pupils should be taught to:	Lesson objectives Pupils will be taught to:	Lesson
Number – Addition and subtraction	Week 1	
 add and subtract numbers mentally, including: a three-digit number and ones a three-digit number and tens 	Add three-digit numbers using the expanded written method of column addition Estimate the answer to a calculation	1
 a three-digit number and hundreds add and subtract numbers with up to three digits, using formal written methods of columnar addition and 	Add three-digit numbers using the formal written method of column addition Estimate the answer to a calculation	2
subtraction estimate the answer to a calculation and use inverse operations to check answers.	Add three-digit numbers using the formal written method of column addition Estimate the answer to a calculation	3
 solve problems, including missing number problems, using number facts, place value, and more complex addition and 	Add numbers mentally and use the inverse operation to check the answer	4
subtraction	Week 2	
Measurement (money) • add and subtract amounts of money to give change, using both £ and p in practical contexts	Subtract three-digit numbers using the formal written method of column subtraction (decomposition) Estimate the answer to a calculation	1
	Subtract three-digit numbers using the formal written method of column subtraction (decomposition) Estimate the answer to a calculation	2
	Subtract numbers mentally and use the inverse operation to check the answer	3
	Add and subtract amounts of money Solve problems involving money and reason mathematically	4
Statistics	Week 3	
• interpret and present data using bar charts, pictograms and	Interpret and present data using tables and charts	1
tables • 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 and tables	Interpret and present data in pictograms where one picture represents 2 units	2
	Interpret and present data in bar charts with intervals labelled in multiples of 2	3
	Use information presented in scaled pictograms, bar charts and tables to answer questions	4

Number – Multiplication and division, including No Unit 8 Number – Fractions Measurement (perimeter)	umber and place value	
National Curriculum attainment targets Pupils should be taught to:	Lesson objectives Pupils will be taught to:	Lesson
Number – Multiplication and division	Week 1	
 recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables 	Count on and back in multiples of 50 and 100Find 100 more or less than a given number	1
solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in	• Consolidate recall of the multiplication facts for the 2, 3, 4, 5, 8 and 10 multiplication tables, and related facts involving multiples of 10	2
integer scaling problems and correspondence problems in which n objects are connected to m objects	 Consolidate recall of the division facts for the 2, 3, 4, 5, 8 and 10 multiplication tables, and related facts involving multiples of 10 	3
Number - Number and place value	Solve problems and reason mathematically	4
• count from 0 in multiples of 50 and 100; find 100 more or less than a given number		
Number – Fractions	Week 2	
• recognise and show, using diagrams, equivalent fractions with small denominators	Compare and order fractions with the same denominatorsSolve fraction problems and reason mathematically	1
• subtract fractions with the same denominator within one	Subtract fractions within one whole	2
whole compare and order unit fractions, and fractions with the	Recognise equivalent fractions	3
same denominator • solve problems that involve all of the above	Recognise equivalent fractions using a fraction wall	4
Measurement (perimeter)	Week 3	
measure the perimeter of simple 2-D shapes	Calculate the perimeter of rectangles in centimetres and in metres	1
·	Using a ruler, draw and calculate the perimeter of rectangles	2
	Measure and calculate the perimeter of regular 2-D shapes to the nearest centimetre	3
	Measure and calculate the perimeter of 2-D shapes to the nearest centimetre	4

Number – Number and place value Unit 9 Number – Addition and subtraction Geometry – Properties of shape		
National Curriculum attainment targets Pupils should be taught to:	Lesson objectives Pupils will be taught to:	Lesson
Number – Number and place value	Week 1	
 recognise the place value of each digit in a three-digit number (hundreds, tens, ones) 	Compare and order numbers up to 1000 Read and write numbers to 1000 in numerals and in words	1
• compare and order numbers up to 1000	Compare and order numbers up to 1000	2
 identify, represent and estimate numbers using different representations 	Partition three-digit numbers in various ways	3
• read and write numbers up to 1000 in numerals and in words	Solve number problems and reason mathematically	4
• solve number problems and practical problems involving these ideas		
Number – Addition and subtraction	Week 2	
 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 mentally Add three-digit numbers using the formal written method of column addition Estimate and check the answer to a calculation	2
 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 	Subtract three-digit numbers using the formal written method of column subtraction (decomposition) Estimate and check the answer to a calculation	3
operations to check answers solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction	Solve problems and reason mathematically	4
Geometry – Properties of shape	Week 3	
• draw 2-D shapes and make 3-D shapes using modelling	Know when a line is horizontal or vertical	1
materials; recognise 3-D shapes in different orientations and describe them	Know when a pair of lines are perpendicular or parallel	2
identify horizontal and vertical lines and pairs of	Describe the properties of 2-D shapes	3
perpendicular and parallel lines	Describe the properties of 3-D shapes	4

Number – Multiplication and division Unit 10 Number – Fractions Measurement (volume and capacity)		
National Curriculum attainment targets Pupils should be taught to:	Lesson objectives Pupils will be taught to:	Lesson
Number - Multiplication and division	Week 1	
write and calculate mathematical statements for multiplication using the multiplication tables that they	 Use partitioning to calculate TO x O Estimate and check the answer to a calculation 	1
know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods	Use partitioning and the grid method to calculate TO x O Estimate and check the answer to a calculation	2
solve problems, including missing number problems, involving multiplication and division, including positive	Use the expanded written method to calculate TO x O Estimate and check the answer to a calculation	3
integer scaling problems and correspondence problems in which n objects are connected to m objects	Solve problems and reason mathematically	4
Number – Fractions	Week 2	
• count up and down in tenths; recognise that tenths	• Find fractions of numbers	1
arise from dividing an object into 10 equal parts and in	Solve fraction problems and reason mathematically	2
dividing one-digit numbers or quantities by 10 • recognise, find and write fractions of a discrete set of	Recognise equivalent fractions	3
objects: unit fractions and non-unit fractions with small	Count up and down in tenths	4
denominators	• Find tenths by dividing by 10	
 recognise and show, using diagrams, equivalent fractions with small denominators solve problems that involve all of the above 		
Measurement (volume & capacity)	Week 3	
measure, compare, add and subtract volume/capacity	• Know the equivalent of $\frac{1}{2}$, $\frac{1}{4}$, $\frac{3}{4}$ and $\frac{1}{10}$ of 1 litre in millilitres	1
(<i>l</i> /ml)	• Read scales marked in litres and in millilitres to the nearest 100 ml	2
	Measure and compare capacities; use simple scaling of quantities and equivalents of mixed units	3
	Add and subtract capacity using mixed units	4

Unit 11 Number – Addition and subtraction, including Measu Measurement (time)	rement (money)	
National Curriculum attainment targets Pupils should be taught to:	Lesson objectives Pupils will be taught to:	Lesson
Number – Addition and subtraction	Week 1	
 add and subtract numbers mentally, including: a three-digit number and ones a three-digit number and tens 	Add three-digit numbers using the formal written method of column addition Estimate and check the answer to a calculation	1
 a three-digit number and hundreds add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction 	Add three-digit numbers using the formal written method of column addition Estimate and check the answer to a calculation	2
 estimate the answer to a calculation and use inverse operations to check answers 	Add and subtract amounts of money	3
solve problems, including missing number problems, using number facts, place value, and more complex addition and	Add and subtract amounts of money Solve problems involving money and reason mathematically	4
subtraction	Week 2	
Measurement (money) • add and subtract amounts of money to give change, using both £ and p in practical contexts	Subtract three-digit numbers using the formal written method of column subtraction (decomposition) Estimate and check the answer to a calculation	1
	Subtract three-digit numbers using the formal written method of column subtraction (decomposition) Estimate and check the answer to a calculation	2
	Add numbers mentally and use the inverse operation to check the answer	3
	Subtract numbers mentally and use the inverse operation to check the answer	4
Measurement (time)	Week 3	
• tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks	Tell and write the time to the nearest minute from a 12-hour analogue clock and from a 12-hour digital clock	1
 estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, 	Use the vocabulary of time and the relationships between seconds, minutes and hours to estimate, compare and record time	2
minutes and hours; use vocabulary such as o'clock, a.m./p.m., morning, afternoon, noon and midnight • know the number of seconds in a minute and the number of days in each month, year and leap year • compare durations of events [for example to calculate the time taken by particular events or tasks]	Know the number of days in each month, year and leap year	3
	Calculate and compare the time taken to complete a task or an event	4

Unit 12 Number - Multiplication and division Statistics		
National Curriculum attainment targets Pupils should be taught to:	Lesson objectives Pupils will be taught to:	Lesson
Number – Multiplication and division	Week 1	
 write and calculate mathematical statements for multiplication and division using the multiplication 	 Use the expanded written method to calculate TO x O Estimate and check the answer to a calculation 	1
tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods	Use the formal written method to calculate TO x O Estimate and check the answer to a calculation	2
solve problems, including missing number problems, involving multiplication and division,	Use the formal written method to calculate TO x O Estimate and check the answer to a calculation	3
including positive integer scaling problems and	Solve problems and reason mathematically	4
correspondence problems in which n objects are connected to m objects	Week 2	
	Use partitioning to calculate TO ÷ O Estimate and check the answer to a calculation	1
	Use the expanded written method to calculate TO ÷ O Estimate and check the answer to a calculation	2
	Use the formal written method to calculate TO ÷ O Estimate and check the answer to a calculation	3
	Solve problems and reason mathematically	4
Statistics	Week 3	
interpret and present data using bar charts, pictograms and tables 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 and tables	• Interpret and present data in pictograms where one picture represents 2 or 5 units	1
	• Interpret and present data in bar charts with intervals labelled in multiples of 5 or 10	2
	• Use information presented in scaled pictograms and tables to answer questions	3
	• Use information presented in scaled bar charts and tables to answer questions	4