Year 2

Weeks 1 - 4

Unit 1

Numbers 10 – 100

1   Pupils explain that one ten is equivalent to ten ones

2   Pupils represent multiples of ten using their numerals

3   Pupils represent multiples of ten using their numerals and names

4   Pupils represent multiples of ten in an expression or an equation

5   Pupils estimate the position of multiples of ten on a 0-100 number line

6   Pupils explain what happens when you add and subtract ten to a multiple of ten

7   Pupils use knowledge of facts and unitising to add and subtract multiples of ten

8   Pupils add and subtract multiples of ten

9   Pupils explore the counting sequence for counting to 100 and beyond

10   Pupils count a large group of objects by counting groups of tens and the extra ones

11   Pupils count a large group of objects by using knowledge of unitising by counting tens and ones

12   Pupils represent a number from 20-99 in different ways

13   Pupils explain and mark the position of numbers 20-99 on a number line

14   Pupils explain that numbers 20-99 can be represented as a length

15   Pupils compare two, two-digit numbers

16   Pupils partition a two-digit number into tens and ones

17   Pupils add two, two-digit numbers by partitioning into tens and ones

Unit 2

Weeks 5 – 7

Calculations within 20

1   Pupils add three addends

2   Pupils use a 'First... Then… Now" story to add 3 addends

3   Pupils explain that addends can be added in any order

4   Pupils add 3 addends efficiently

5   Pupils add 3 addends efficiently by finding two addends that total 10

6   Pupils add two numbers that bridge through 10

7   Pupils subtract two numbers that bridge through 10

8   Pupils compare numbers and describe how many more or less there are in each set

9   Pupils calculate the difference

10   Pupils use knowledge of subtraction to solve problems in a range of contexts

11   Pupils explain what the difference is between consecutive numbers

12   Pupils calculate difference when information is presented in a pictogram

13   Pupils calculate difference when information is presented in a bar chart

Unit 3

Week 8

Fluently add and subtract within 10

1   Pupils demonstrate their fluency of addition and subtraction within ten

2   Pupils practise addition and subtraction strategies as required

Unit 4

Weeks 9-10

Addition and subtraction of 2-digit numbers

1   Pupils add and subtract one to and from a two-digit number

2   Pupils add and subtract one to and from a two-digit number that crosses a tens boundary

3   Pupils add and subtract one from any two-digit number

4   Pupils use number facts to add a single-digit number to a two-digit number

5   Pupils use number facts to subtract a single-digit number from a two-digit number

6   Pupils use a part-part-whole model to represent addition and subtraction

7   Pupils use number bonds to ten to add a single-digit number to a two-digit number

8   Pupils use number bonds to ten to subtract a single-digit number from a two-digit number

9   Pupils use knowledge of 'make ten' to add a one-digit number to a two-digit number

10   Pupils use knowledge of 'make ten' to subtract a multiple of ten or a single-digit from a two-digit number

11   Pupils solve problems using knowledge of addition and subtraction

12   Pupils find ten more or ten less than a two-digit number (1)

13   Pupils find ten more or ten less than a two-digit number (2)

14   Pupils add and subtract ten to/from a two-digit number

15   Pupils explain the patterns when adding and subtracting ten

16   Pupils use knowledge of adding and subtracting ten to solve problems

17   Pupils use number facts to add a multiple of ten to a two-digit number

18   Pupils use number facts to subtract a multiple of ten from a two-digit number

19   Pupils partition a two-digit number into parts in different ways (two and three parts)

20   Pupils use knowledge of adding and subtracting multiples of ten to solve problems

Unit 5

Weeks 11-17

Introduction to multiplication

1   Pupils explain that objects can be grouped in different ways

2   Pupils describe how objects have been grouped

3   Pupils represent equal groups as repeated addition

4   Pupils represent equal groups as repeated addition and multiplication

5   Pupils represent equal groups as multiplication

6   Pupils explain and represent multiplication when a group contains zero or one items

7   Pupils identify and explain each part of a multiplication equation

8   Pupils use knowledge of multiplication to calculate the product

9   Pupils represent the two times table in different ways

10   Pupils use knowledge of the two times table to solve problems

11   Pupils explain the relationship between adjacent multiples of two

12   Pupils explain that factor pairs can be written in any order

13   Pupils represent counting in tens as the ten times table

14   Pupils represent the ten times table in different ways

15   Pupils explain the relationship between adjacent multiples of ten

16   Pupils represent counting in fives as the five times table

17   Pupils represent the five times table in different ways

18   Pupils explain the relationship between adjacent multiples of five

19   Pupils explain how groups of five and ten are related

20   Pupils explain the relationship between multiples of five and ten

21   Pupils use knowledge of the relationships between the five and ten times tables to solve problems

22   Pupils explain how a factor of zero or one affect the product

23   Pupils represent multiplication equations in different ways

24   Pupils use knowledge of the two, five and ten times tables to solve problems (1)

25   Pupils use knowledge of the two, five and ten times tables to solve problems (2)

26   Pupils explain what each factor represents in a multiplication story

27   Pupils explain what each factor represents in a multiplication story when one of the factors is one

28   Pupils explain how a multiplication equation with two as a factor is related to doubling

29   Pupils double two-digit numbers

30   Pupils multiply efficiently when one of the factors is two

31   Pupils explain how halving and doubling are related

32   Pupils explain the relationship between factors and products

33   Pupils halve two-digit numbers

34   Pupils use knowledge of doubling, halving and the two times table to solve problems

Unit 6

Weeks 18 – 19

Introduction to division structures

1   Pupils explain that objects can be grouped equally

2   Pupils identify and explain when objects cannot be grouped equally

3   Pupils explain the relationship between division expressions and division stories

4   Pupils calculate the number of equal groups in a division story

5   Pupils use their knowledge of skip counting and division to solve problems relating to measure

6   Pupils skip count using the divisor to find the quotient

7   Pupils use their knowledge of division to solve problems

8   Pupils explain that objects can be shared equally

9   Pupils use skip counting to solve a sharing problem

10   Pupils skip count using the divisor to find the quotient

11   Pupils solve a variety of division problems, explaining their understanding

Unit 7

Weeks 20-21

Shape

1   Pupils learn that a polygon is a 2D shape with straight sides that meet at vertices

2   Pupils describe polygons and find different ways to sort them

3   Pupils learn that polygons can be sorted and named according to the number of sides and vertices

4   Pupils discuss, and compare by direct comparison, the shape and size of polygons

5   Pupils discuss, and compare by direct comparison, the vertices of polygons

6   Pupils investigate how polygons can be joined and folded to form 3-dimensional shapes

7   Pupils describe 3-dimensional shapes and find different ways to sort them

8   Pupils discuss, and compare by direct comparison, the shape and size of 3-dimensional shapes

Unit 8

Weeks 22-24

Addition and Subtraction of 2-gigit numbers

1   Pupils explain strategies used to add

2   Pupils add a two-digit number to a two-digit number

3   Pupils add a two-digit number to a two-digit number when not crossing ten (i)

4   Pupils add a two-digit number to a two-digit number when not crossing ten (ii)

5   Pupils add a two-digit number to a two-digit number when crossing ten

6   Pupils explain strategies used to subtract

7   Pupils subtract a two-digit number from a two-digit number

8   Pupils partition the subtrahend to help with subtraction

9   Pupils subtract a two-digit number from a two-digit number when not crossing ten (i)

10   Pupils subtract a two-digit number from a two-digit number when not crossing ten (ii)

11   Pupils subtract a two-digit number from a two-digit number when crossing ten

12   Pupils subtract efficiently using knowledge of two-digit numbers

Unit 9

Week 25

Money

recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value

find different combinations of coins that equal the same amounts of money

solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change.

Unit 10

Week 26-27

Fractions

1   Pupils identify whether something has or has not been split into equal parts

2   Pupils name the fraction 'one-half' in relation to a fraction of a length, shape or set of objects

3   Pupils name the fraction 'one-quarter' in relation to a fraction of a length, shape or set of objects

4   Pupils name the fraction 'one-third' in relation to a fraction of a length, shape or set of objects

5   Pupils read and write the fraction notation ½, ⅓ and ¼ and relate this to a fraction of a length, shape or set of objects

6   Pupils find half of numbers

7   Pupils find ⅓ or ¼ of a number

8   Pupils find ¼ and ¾ of an object, shape, set of objects, length or quantity

9   Pupils recognise the equivalence of 2⁄4 and ½

Unit 11

Week 28

Time

compare and sequence intervals of time

tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times

know the number of minutes in an hour and the number of hours in a day.

Unit 12

Week 29

Position and Direction

order and arrange combinations of mathematical objects in patterns and sequences

use mathematical vocabulary to describe position, direction and movement, including movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anti-clockwise).

Unit 13

Weeks 30-32

Multiplication and division – doubling, halving, quotitive and partitive division

1   Pupils identify the patterns and relationships between the 5 and 10 times tables

2   Pupils explain the patterns and relationships between the 5 and 10 times tables

3   Pupils use their knowledge of the 5 and 10 times tables to solve problems

4   Pupils identify and explain relationships between the 5 and the 10 times tables

5   Pupils use their knowledge of the 5 and 10 times tables to solve problems

6   Pupils explain how times table facts can help to find the quotient (10 times table)

7   Pupils explain how times table facts can help to find the quotient (5 times table)

8   Pupils explain how times table facts can help to find the quotient (2 times table)

9   Pupils explain how a division equation with 2 as a divisor is related to halving

10   Pupils explain each part of a division equation and know how they can be interchanged

11   Pupils use knowledge of divisibility rules when the divisor is 2 to solve problems

12	Pupils use knowledge of divisibility rules when then divisor is 10 to solve problems
13	Pupils use knowledge of divisibility rules when the divisor is 5 to solve problems
14	Pupils explain how a dividend of zero affects the quotient
15	Pupils explain how the quotient is affected when the divisor is equal to the dividend
16	Pupils explain how a divisor of one affects the quotient

Unit 14

Weeks 33-34

Sense of measure – capacity, volume, mass

choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature (°C); capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels

compare and order lengths, mass, volume/capacity and record the results using >, < and = .

Unit 15

Weeks 35-37

Statistics

interpret and construct simple pictograms, tally charts, block diagrams and simple tables

ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity

ask and answer questions about totalling and comparing categorical data.