

# Year 2 Objectives: Number

## NUMBER AND PLACE VALUE

### Read and write numbers to 100 in numerals and words

Read and write all numbers to 20

Read and write all numbers to 50

Read and write all numbers to 100

### Recognise the place value of each digit in a 2-digit number (tens and ones)

Know which is the 10s and units part of a 2-digit number

Partition a 2-digit number showing the true value of each digit

### Count in steps of 2, 3, 5 and 10 from any number

Count in 10s to 100

Count in 2s to 50 then 100

Count in 5s to 50 then 100

Count in 3s to 30, 60 and then to 99

## NUMBER AND PLACE VALUE

### Give 10 more or less than any number to 100

Know 10 more than any number to 50 and then to 100

Know 10 less than any number from 50 and then from 100

### Use $<$ , $>$ and $=$ signs to compare and order numbers to 100

Know what the  $=$  symbol stands for

Know what the  $<$  symbol stands for

Know what the  $>$  symbol stands for

Use the  $=$  accurately in simple calculations

Use the  $<$  symbol between 2 numbers accurately

Use the  $>$  symbol between 2 numbers accurately

# Year 2 Objectives : Number 2

## NUMBER AND PLACE VALUE

### Order, read and write numbers in increasing and decreasing value

Order a set of numbers (at least 3) in increasing value using numbers up to 50

Order a set of numbers (at least 3) in decreasing value using numbers up to 50

Order a set of numbers (at least 3) in increasing value using numbers up to 100

Order a set of numbers (at least 3) in decreasing value using numbers up to 100

### Use number facts and place value to solve number facts

Solve problems such as  $50 + \square = 54$ ; and  $\square + 9 = 39$

## ADDITION AND SUBTRACTION

### Rapidly recall and use addition and subtraction facts to 20

Know all addition number bonds to 10 instantly

Know all addition number bonds to 20 instantly

Know all subtraction number bonds to 10 instantly

Know all subtraction number bonds to 20 instantly

Relating these number facts to work out larger numbers, if  $3 + 5 = 8$ , then  $30 + 50 = 80$

### Add and subtract up to 2-digit numbers using written methods including column addition (without carrying or borrowing)

Complete horizontal addition of a 1-digit and a 2-digit number with answers up to 50 and then up to 100

Complete horizontal subtraction, taking a 1-digit number from a 2-digit number with answers of no more than 50 and then with answers of no more than 100

Add two 2-digit numbers together using column addition (where the two units do not add up to 10)

Subtract a 2-digit number from another 2-digit number with numbers which do not involve borrowing from the tens column

# Year 2 Objectives : Number 3

## NUMBER AND PLACE VALUE

### Recognise odd and even numbers

Know all even numbers to 10

Know all odd numbers to 1

Know all even numbers to 20, then to 50, then to 100

Know all odd numbers to 20, then to 50, then to 100

Know that an even number can be shared between 2

### Read and write: 1 to 20 in numerals and words

Read all numbers as numerals and words to 10

Write all numbers as numerals and words to 10

Read all numbers as numerals and words to 20

Write all numbers as numerals and words to 20

## NUMBER AND PLACE VALUE

### Distinguish between and use: Ordinal and Cardinal numbers

Find missing numbers in a sequence up to 10

Find missing numbers in a sequence up to 20

Order objects using the terms 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup>, etc.

Know the 5ness of 5

Know that a set of 5 objects contains more objects than, say 3, etc. (up to 10)

Subtract a 2-digit number from another 2-digit number with numbers which do not involve borrowing from the tens column

# Year 2 Objectives : Number 4

## ADDITION AND SUBTRACTION

### Add and subtract mentally: a 2-digit number and ones, a 2-digit number and tens, two 2-digit numbers

Rapid recall of a 2-digit number added to a 1-digit number

Rapid recall of 1-digit number taken away from a 2-digit number

Rapid recall of 10 added to a 2-digit number

Rapid recall of any 10s number added to a 2-digit number (answer no more than 100)

Rapid recall of 10 taken away from a 2-digit number

Rapid recall of any 10s number taken away from a 2-digit number

Rapid recall of the addition of any two 2-digit numbers that do not total above 100

## ADDITION AND SUBTRACTION

### Use subtraction in 'take away' and 'find the difference' problems

Complete number problems which requires a number to be taken away from another, eg, If I have 23 sweets and I eat 5, how many are there left?

Complete number problems which requires working out the difference between two number, eg, John has read 16 books and Nadir has read 13 books. How many more books has John read?

### Recognise that addition can be done in any order, but subtraction cannot

Know that when adding numbers together they can be set out in any order, eg,  $5 + 7$  will be same as  $7 + 5$ ; or  $3 + 5 + 4$  will be the same as  $5 + 4 + 3$

Know that when subtracting the order is very important, eg,  $7 - 5$  cannot be set out as  $5 - 7$

### Recognise that subtraction is the inverse of addition and use for checking calculations

Know that  $5 + 7 = 12$  involves the same process as  $12 - 7 = 5$ , or  $12 - 5 = 7$

Completes calculations such as: If  $6 + 8 = 14$ ; what is  $14 - 8$

# Year 2 Objectives : Number 5

## ADDITION AND SUBTRACTION

### Solve addition and subtraction word problems with up to 2-digits

Solve simple word problems involving addition to 50

Solve simple word problems involving subtraction to 50

Solve simple word problems involving addition to 100

Solve simple word problems involving subtraction to 100

## MULTIPLICATION AND DIVISION

### Recall multiplication and division facts for the 2, 5 and 10 times tables

Recite the 2x table rapidly, up to x12, without error

Answer rapidly any calculation involving the 2x table out of order

Know that  $2 \times 4$  is the same as  $4 \times 2$

Recite the 10x table rapidly, up to x12, without error

Recognise  $\times 2$  is doubling

Recognise  $\div 2$  is halving

Answer rapidly any calculation involving the 10x table out of order

Know that  $3 \times 10$  is the same as  $10 \times 3$

Recite the 5x table rapidly, up to x12, without error

Answer rapidly any calculation involving the 5x table out of order

Know that  $6 \times 5$  is the same as  $5 \times 6$

# Year 2 Objectives : Number 6

## MULTIPLICATION AND DIVISION

### Use $\times$ , $\div$ and $=$ signs to read and write mathematical statements

Know that the ' $\times$ ' sign stands for multiplication

Know that the ' $\div$ ' sign stands for division

Know that the ' $=$ ' sign stands for equals

Uses the  $\times$ ,  $\div$ , and  $=$  signs in simple calculations for numbers up to 100

### Calculate and write multiplication and division statements

Calculate and write out simple multiplication statements, such as  $6 \times 3 = 18$

Calculate and write simple division statements, such as  $16 \div 4 = 4$

### Recognise that division is the inverse of multiplication and use to check calculations

Know that examples such as  $8 \times 3 = 24$  corresponds to  $24 \div 3 = 8$

Know that examples such as  $21 \div 7 = 3$  corresponds to  $3 \times 7 = 21$

## MULTIPLICATION AND DIVISION

### Recognise that multiplication can be done in any order, but division cannot

Know that  $8 \times 3 = 24$  can be set out as  $3 \times 8 = 24$

Know that  $21 \div 3 = 7$  cannot be set out as  $3 \div 21$

### Solve word problems involving multiplication and division

Solve simple word problems involving multiplication to 50

Solve simple word problems involving division to 50

Solve simple word problems involving multiplication to 100

Solve simple word problems involving division to 100

# Year 2 Objectives : Number 7

FRACTIONS	
<b>Recognise, name and write fractions <math>\frac{1}{4}</math>, <math>\frac{1}{3}</math>, <math>\frac{1}{2}</math>, <math>\frac{2}{3}</math> and <math>\frac{3}{4}</math> of a whole</b>	
Know that the symbol $\frac{1}{2}$ stands for half the value of...	
Know that the symbol $\frac{1}{4}$ stands for a third of the value of..	
Know that the symbol $\frac{3}{4}$ stands for a third of the value of..	
Know that the symbol $\frac{1}{3}$ stands for a third of the value of..	
Know that the symbol $\frac{2}{3}$ stands for a third of the value of..	
Calculate $\frac{1}{2}$ of a given number up to 100	
Calculate $\frac{1}{4}$ of a given number up to 100	
Calculate $\frac{3}{4}$ of a given number up to 100	
Calculate $\frac{1}{3}$ of a given number up to 100	
Calculate $\frac{2}{3}$ of a given number up to 100	

FRACTIONS	
<b>Count in halves and quarters to 10</b>	
Count in sequence up to 10: $\frac{1}{2}$ ; 1; $1\frac{1}{2}$ , 2, $2\frac{1}{2}$ , .....	
Count in sequence up to 10: $\frac{1}{4}$ , $\frac{1}{2}$ , $\frac{3}{4}$ , 1, $1\frac{1}{4}$ , $1\frac{1}{2}$ , .....	

# Year 2 Objectives : Geometry and Measures

PROPERTIES AND SHAPE	
<b>Recognise and name common 2D and 3D shapes</b>	
Know and name squares, rectangles, triangles and circles	
Know and name cubes, cuboids, spheres, pyramids	
<b>Identify and describe properties of 2D and 3D shapes (sides, right angles, lines of symmetry)</b>	
Recognise a right angle in different contexts	
Identify a line of symmetry in simple shapes	
Make up own symmetrical shapes	
Identify 2-D shapes according to sides and number of edges, etc.	
Identify simple 3-D shapes according to sides, right angles, edges, faces, etc	
<b>Identify and describe properties of polygons and non-polygons</b>	
Practise using a ruler to draw polygons accurately	

PROPERTIES AND SHAPE	
<b>Identify and describe properties of 3D shapes (edges, vertices and faces)</b>	
Identify simple 3D shapes according to sides, right angles, edges, faces, etc	
Use terms vertices and faces when describing 3D shapes	
<b>Identify 2D shapes on the surface of 3D shapes</b>	
Describe 3D shapes according to their 2D make up, eg, number of squares, triangles, etc.	
Begin to explore nets of 3D shapes according to 2D shapes contained within them, eg, a cube has 6 squares	
<b>Compare and sort common 2D and 3D shapes</b>	
Put together sets of triangles, recognising their similarities and differences	
Put together sets of rectangles recognising their similarities and differences	
Put together sets of circles and spheres recognising the differences in their size	



# Year 2 Objectives : Geometry and Measures: 2

## POSITION, DIRECTION AND MOTION

Use vocabulary to describe position, direction and movement including rotation (as a turn and as right angle for quarter and half turns – clockwise and anti-clockwise, and movement on a straight line

Use the term clockwise, anticlockwise, right angle, half turn, quarter turn

## MEASURES

Estimate and measure using appropriate standard units, using appropriate measuring vessels, rulers and scales:

Height/length (m, cm, mm)

Mass (kg, g)

Temperature (°C)

Volume and capacity (l, ml)

Estimate a distance of up to 5 metres

Name objects that are more or less than a meter long or high

Know how long a centimetre is

Know that 100 centimetres make up 1 metre

Use a ruler to measure 5cm, 10cm, 20cm and 30cm accurately

Name objects that are approximately 10 cm long

# Year 2 Objectives : Geometry and Measures: 3

## MEASURES

### Tell the time to half past the hour from half past one through to half past twelve (Contd)

Write m and cm to represent metre and centimes respectively

Recognise mm as a very small amount

Know that 10 mm is 1 centimetre

Know 1Kg and make reasonable estimates of weight up to 5Kg

Name objects that weigh more or less than 1Kg, 10Kg

Know how much they weigh in Kg

Know that Kg is a written format for Kilogram

Know how much 1 litre is

Know that many liquids are sold in 1 litre amounts

Know amounts that are more or less than 1 litre

Know that 0°C is freezing

Know that 100°C is boiling

Estimate the temperature outside to a reasonable approximation

## MEASURES

### Compare and order lengths, mass, volume/capacity and record results (using <, > and =)

Order different lengths using metres and centimetres

Order different weights using Kilograms and grams

Use the symbols >, <, and = to compare two amounts of lengths and weight

Record information using >, <, and =

Record amounts of liquid using litres and millilitres

Use >, <, and = to compare amount of liquid

### Read scales to the nearest numbered unit

Read weighing scales to the nearest 10 gram units

Read lengths to the nearest centimetre

Read liquid amounts to the nearest 10 ml

# Year 2 Objectives : Geometry and Measures: 4

## MEASURES

### Tell and write the time to 5 minutes (including quarter to and past)

Read the clock to o'clock and half past

Read the clock to quarter past and quarter to

Read the clock in five minute intervals past the hour

Read the clock to five minute intervals to the hour

Draw times on clock faces to the intervals of o'clock, half past, quarter past and quarter to the hour

### Recognise coins and notes of different values

Recognise all coins from 1p to 50p

Recognise all notes from £5 to £50

### Combine amounts to make values and match combinations of coins to amounts of money

Combine coins between the value of 10p and 50p and say how much altogether up to £1

Combine coins between the value of 10p and 50p and say how much altogether up to the value of £5

Combine notes and coins to make up amounts to the value of £10

Combine notes and coins to make up amounts to the value of £50

## MEASURES

### Add and subtract money of the same unit

Add 2 different amount of money using combinations of £ and 50p

Add 2 different amounts of money using combinations of £ and 10p

Add 2 different amounts of money using combination of notes and coins to the value of 10p

# Year 2 Objectives : Geometry and Measures: 5

<b>DATA</b>	
<b>Construct and interpret pictograms, tables and simple graphs</b>	
Read information contained within a pictogram	
Read information contained within a simple matrix table	
Read information contained within a block graph	
Read information contained within a simple bar graph	
Construct a bar graph to show information collected (amounts of less than 10)	