

Year 4 Objectives: Number

NUMBER AND PLACE VALUE	
Read and write numbers to at least 10,000	
Revise reading and writing numbers to: 100 and then to 1000;	
Read and write number to 5000	
Read and write numbers to 10,000	
Recognise place value of each digit in a 4-digit number	
Know and use terms: units; tens, hundreds and thousands correctly	
Partition any number up to 9,999 showing the value of each digit	
Order and compare numbers up to 10,000	
Know which of two 4-digit numbers is the greater and smaller	
Order a set of 4-digit numbers from smallest to largest	
Order a set of 4-digit numbers from largest to smallest	

NUMBER AND PLACE VALUE	
Count in multiples of 2, 3, 4, 5, 6, 7, 8, 9, 10, 25, 50, 100 and 1000 from any given number.	
Count on and back in 1000s from 0 to 10,000	
Count on and back in 10s from any given number between 0 and 10,000	
Count on and back in 100s from 0 to 10,000	
Count on and back in 3s from 0 to 1000 starting at any given number	
Count on and back in 3s from 0 to 1000 starting at any given number	
Count on and back in 4s from 0 to 1000 starting at any given number	
Count on and back in 5s from 0 to 1000 starting at any given number	
Count on and back in 8s from 0 to 1000 starting at any given number	
Count on and back in 6s from 0 to 1000 starting at any given number	
Count on and back in 9s from 0 to 1000 starting at any given number	

Year 4 Objectives : Number 2

NUMBER AND PLACE VALUE

Round any number to the nearest 10 or 100

Round any number up to 100 to the nearest 10

Round any number up to 1000 to the nearest 10

Round any number up to 1000 to the nearest 100

Read and write negative numbers; order, count forwards and backwards with positive and negative numbers including zero

Know the that the value of any negative number is less than 0

Know which of 2 negative numbers is the greater, eg, -2 is greater than -5

Know which of 2 negative numbers is the smaller, eg, -7 is smaller than -4

Count accurately forwards from any negative number to any positive number, moving across the 0

Count accurately backwards from any positive number to any negative number, moving across the 0

Order a set of negative and positive numbers showing largest or smallest first

NUMBER AND PLACE VALUE

Read Roman numerals to 100

Know the Roman numbers from 1 to 10

Know the Roman symbol for 50

Know the Roman symbol for 100

Solve word problems involving negative and increasingly large positive numbers

Solve problems which requires movement between negative and positive numbers

Year 4 Objectives : Number 3

ADDITION AND SUBTRACTION

Add and subtract numbers using formal written methods with up to 4-digits

Add 2 numbers with 4-digits together using column addition without exchange between units and tens

Add 2 numbers with 4-digits together using column addition, where the units, tens or hundreds when added make more than 10.

Add 3 numbers with 4-digits using column addition where the units, tens or hundreds make more than 10

Subtract a 4-digit number from another using column subtraction which requires no exchange between the units, tens, hundreds or thousands

Subtract a 4-digit number from another using column subtraction which requires exchange between the units, tens, hundreds or thousands (or any two of these)

ADDITION AND SUBTRACTION

Add and subtract numbers mentally including two 2-digit numbers

Add together mentally any single-digit and any 2-digit number

Subtract any single-digit number from a 2-digit number

Add together mentally any single-digit and any 3-digit number

Subtract any single-digit number from a 3-digit number

Add together mentally any two 2-digit numbers

Subtract mentally any two 2-digit numbers

Add together mentally any 1000s number and any 4-digit number

Subtract any 1000s number from a 4-digit number

Year 4 Objectives : Number 4

ADDITION AND SUBTRACTION

Estimate, within a range, the answer to a calculation and use inverse operations to check answers

Estimate the answer to any given addition involving two 2-digit numbers to the nearest 10

Estimate the answer to any given addition involving two 3-digit numbers to the nearest 100

Estimate the answer to any given addition involving two 3-digit numbers to the nearest 10

Estimate the answer to any given subtraction involving two 2-digit numbers to the nearest 10

Estimate the answer to any given subtraction involving two 3-digit numbers to the nearest 100

Estimate the answer to any given subtraction involving two 3-digit numbers to the nearest 10

Know the meaning of the term 'inverse'

Check the answer to any given addition involving 2 numbers by using the inverse method

Check the answer to any given subtraction by using the inverse method

MULTIPLICATION AND DIVISION

Recall multiplication and division facts for tables up to 12 x 12

Recite all multiplication facts for the x6 table

Recite all multiplication facts for the x9 table

Recite all multiplication facts for the x11 table

Recite all multiplication facts for the x7 table

Recite all multiplication facts for the x12 table

Recall all number facts for the 6, 7, 9, 11 and 12x table out of sequence

Know the inverse of all table facts involving 6, 7, 9, 11 and 12x table, eg, how many 7s in 63?

Mentally calculate multiplication and division calculations, including multiplying by 0 and dividing by 1

Use all table facts up to 12x in calculations involving multiplication and division

Know what happens when multiplying by 0 or 1

Year 4 Objectives : Number 5

MULTIPLICATION AND DIVISION

Multiply and divide 2-digit and 3-digit numbers by 1-digit number using formal written methods, interpret remainders as integers

Multiply a 100s number by a single-digit number mentally, using 2, 3, 4, 5, 6, 7, 8, and 9x

Multiply a 2-digit number by a single-digit number using 2, 3, 4, 5, 6, 7, 8, and 9x

Multiply a 3-digit number by a single-digit number using 2, 3, 4, 5, 6, 7, 8, and 9x

Divide 2, 3, 4, 5, 6, 7, 8, 9 and 10 into any 10s number (no remainder)

Divide 2, 3, 4, 5, 6, 7, 8, 9 and 10 into any 2-digit number (no remainder)

Divide 2, 3, 4, 5, 6, 7, 8, 9 and 10 into any 2-digit number (no remainder)

MULTIPLICATION AND DIVISION

Recognise and use factor pairs within 144

Know the term prime factor and what it means

Know all the factors within all numbers to 10

Work out all the factors within any number up to 144

Know the term square number and know all the square numbers associated with numbers 1 to 144

Solve word problems involving the four operations

Solve word problems involving addition with numbers up to 1000

Solve word problems involving subtraction with numbers up to 1000

Solve word problems involving multiplication with numbers up to 1000

Solve word problems involving division with numbers up to 1000

Year 4 Objectives : Number 6

FRACTIONS

Identify and name equivalent fractions with denominators up to and including 12

Know all the equivalent fractions of $\frac{1}{2}$ up to and including the denominator 12

Know all the equivalent fractions of $\frac{1}{4}$ up to and including the denominator 12

Know all the equivalent fractions of $\frac{3}{4}$ up to and including the denominator 12

Know all the equivalent fractions of $\frac{1}{3}$ up to and including the denominator 12

Know all the equivalent fractions of $\frac{2}{3}$ up to and including the denominator 12

Write equivalent fraction of a fraction given the denominator or numerator

Write the equivalent fraction when given the denominator

Write the equivalent fraction when given the numerator

FRACTIONS

Recognise fractions in their simplest form

Reduce any fraction with a denominator of up to 12 to its simplest form

Add and subtract 2 fractions with common denominators within 1 whole

Add two fraction with a denominator of 4, 5, 6, 10 where the answer is less than 1 whole

Subtract any two fractions with a denominator of 4, 5, 6, 10

Year 4 Objectives : Number 7

DECIMALS

Compare numbers with the same number of decimal places up to 2 decimal places

Given 3 numbers with one decimal place, eg, 34.2; 45.7; 12.8; work out the smallest and largest number and put them in order

Given 3 numbers with two decimal places, eg, 15.67; 19.56; 12.78; work out the smallest and largest number and put them in order

Given a set of numbers with either 1 or 2 decimal places put them in order of either largest first or smallest first

Recognise what happens when dividing a 2-digit number by 10 and 100. Identify value of the digits in answers as units, tenths and hundredths

Divide any 2-digit number by 10 and express answer in terms of tenths

Divide any 2-digit number by 100 and express answer in terms of tenths and hundredths

DECIMALS

Recognise and write decimal equivalents to $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$ and any tenths and hundredths

Know that $\frac{1}{2}$ is 0.5

Know that $\frac{1}{4}$ is 0.25

Know that $\frac{3}{4}$ is 0.75

Know that $\frac{1}{10}$ is 0.1

Year 4 Objectives : Geometry and Measures

PROPERTIES AND SHAPE

Identify lines of symmetry in 2D shapes in different orientations

Know what the term symmetry is

Shows lines of symmetry in a equilateral or isosceles triangle

Shows lines of symmetry in a square and oblong

Understands about lines of symmetry within a circle

Compare and classify geometric shapes based on their properties and sizes

Relates number of angles and sides associated with triangles; squares; oblongs; circles

Identify acute and obtuse angles and compare size of different angles

Know how to describe an acute angle

Know how to describe an obtuse angle

Recognise how angles are measured

Compares angles by size

POSITION, DIRECTION AND MOTION

Describe positions, and movements between positions, on 2D grid, and as coordinates in the first quadrant

Pinpoint a position on a quadrant using numbers along the axes

Explain a change in a given position by the movement made along each axes of the quadrant

Plot specific points and draw sides to make a given polygon

Use the numbers along the axes of a quadrant to plot a completed polygon

Recognise a symmetrical figure and complete a symmetric figure with a specific line of symmetry

Create complex symmetrical figures and show line of symmetry

Recognise line/s of symmetry in given shapes

Year 4 Objectives : Geometry and Measures: 2

MEASURES	
Convert different units of measure e.g. km to m; m to cm; cm to mm; kg to g; l to ml; hour to min; min to sec; year to month; week to days	
Revise relationships between measure, ie, 1000m = 1Km; 100cm = 1m; 10mm = 1cm; 1000g = 1kg; 60 min = 1 hour; 60sec = 1 min; 12 month = 1 year; etc.	
Express a distance of more than 1Km in metres	
Express a distance of more than 1 cm in mm	
Express a weight of more than 1Kg in grams	
Express an amount of more than 1l in ml	
Express the passing of time of more than 1 hour in minutes	
Express the passing of time of more than 1 minute in seconds	

MEASURES	
Measure and calculate the perimeter of a rectilinear figure, where each side is labelled in cm and m	
Know the term perimeter	
Know that the perimeter of a rectangle can be measured by a simple formula of $2 \times \text{length} + 2 \times \text{width}$	
Know that the perimeter of an irregular shape can be measured by adding each individual side together	
Find area of squares, rectangles and related composite shapes	
Know that the area of a square is measured in squared cm or squared meters, etc.	
Know the formula for measuring the area of a square and the area of a rectangle	
Read and convert time between analogue and digital 12- and 24- hour clock	
Know how to set out each analogue time in digital format, eg ten past two = 02.10	
Can convert between analogue and digital in this way	
Know how a 24 hour clock system works, eg, ten past two in the afternoon = 02.10pm = 1410 hours	

Year 4 Objectives : Geometry and Measures: 3

MEASURES

Estimate, compare and calculate different measures, including money in pounds and pence

Carry out simple problems involving money, length, weight, and time

DATA

Read, interpret and solve problems using information in bar graphs, including reading scales on the axes

Read a bar graph accurately with no scales on the axes

Read a bar graph accurately with scales on the axes