Our mathematics curriculum is embedded with play and stories to enable children to:

Number: children **count** reliably with numbers from 1 to 10, place them in order and say which number is **one more** or **one less** than a given number. Using quantities and objects, they **add** and **subtract** two single-digit numbers and **count on or back** to find the answer. They solve problems, including **doubling**, **halving** and **sharing**. Children also have the opportunity to count beyond 10.

Shape, space and measures: children use everyday language to talk about **size**, **weight**, **capacity**, **position**, **distance**, **time** and **money** to compare quantities and objects and to solve problems. They recognise, create and describe **patterns**. They explore characteristics of everyday objects and **shapes** and use mathematical language to describe them.

Early Years Year Overview

In EYFS we follow NCETM's Mastering Number programme.

The programme breaks down number (up to 10) through subitising, cardinality and composition.

In addition to this, EYFS use Development Matters to ensure children are year 1 ready by the time they leave the foundation stage. This supports children in other strands of maths, for example shape and space.

Finally, although EYFS do not use CanDo Maths, they begin to introduce the children to Colin in the summer term.

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Mastering Number

Reception Overview

Term 1	Term 2	Term 3
Pupils will build on previous experiences of number from their home and nursery environments, and further develop their subitising and counting skills. They will explore the composition of numbers within 5. They will begin to compare sets of objects and use the language of comparison. **Pupils will:** • identify when a set can be subitised and when counting is needed • subitise different arrangements, both unstructured and structured, including using the Hungarian number frame • make different arrangements of numbers within 5 and talk about what they can see, to develop their conceptual subitising skills • spot smaller numbers 'hiding' inside larger numbers	Pupils will continue to develop their subitising and counting skills and explore the composition of numbers within and beyond 5. They will begin to identify when two sets are equal or unequal and connect two equal groups to doubles. They will begin to connect quantities to numerals. **Pupils will:** • continue to develop their subitising skills for numbers within and beyond 5, and increasingly connect quantities to numerals • begin to identify missing parts for numbers within 5 • explore the structure of the numbers 6 and 7 as '5 and a bit' and connect this to finger patterns and the Hungarian number frame • focus on equal and unequal groups when comparing numbers	Pupils will consolidate their counting skills, counting to larger numbers and developing a wider range of counting strategies. They will secure knowledge of number facts through varied practice. **Pupils will:** • continue to develop their counting skills, counting larger sets as well as counting actions and sounds • explore a range of representations of numbers, including the 10-frame, and see how doubles can be arranged in a 10-frame • compare quantities and numbers, including sets of objects which have different attributes • continue to develop a sense of magnitude, e.g. knowing that 8 is quite a lot more than 2, but 4 is only a little bit more than 2

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• connect quantities and numbers to finger patterns and explore different ways of representing numbers on their fingers • hear and join in with the counting sequence, and connect this to the 'staircase' pattern of the counting numbers, seeing that each number is made of one more than the previous number • develop counting skills and knowledge, including: that the last number in the count tells us 'how many' (cardinality); to be accurate in counting, each thing must be counted once and once only and in any order; the need for 1:1 correspondence; understanding that anything can be counted, including actions and sounds • compare sets of objects by matching • begin to develop the language of 'whole' when talking about objects which have parts	• understand that two equal groups can be called a 'double' and connect this to finger patterns • sort odd and even numbers according to their 'shape' • continue to develop their understanding of the counting sequence and link cardinality and ordinality through the 'staircase' pattern • order numbers and play track games • join in with verbal counts beyond 20, hearing the repeated pattern within the counting numbers	• begin to generalise about 'one more than' and 'one less than' numbers within 10 • continue to identify when sets can be subitised and when counting is necessary • develop conceptual subitising skills including when using a rekenrek

Mathematical Language EYFS

Number and Place value

Number
zero
one, two, three ... to twenty and beyond
teens numbers, eleven, twelve ... twenty
none
how many ...?
count, count (up) to, count on (from, to), count back (from, to)
count in ones, twos, fives,
tens is the same as
more, less
few pattern pair
ones
tens
digit
the same number as, as many as more, larger, bigger,
greater fewer, smaller, less
fewest, smallest, least
most, biggest, largest,
greatest one more, ten more
one less, ten less
compare
order
size
last, last but one
before, after
next
between

Estimating

guess
how many ...? estimate
nearly
close to
about the same as just over, just under too many, too few
enough, not enough

Addition and Subtraction

add, more, and
make, sum, total
altogether
double
one more, two more ... ten more how many more to make ...? how many more is ... than ...? how much more is ...?
take away
how many are left/left over?
how many have gone?
one less, two less, ten less ...
how many fewer is ... than ...?
how much less is ...?
difference between

Multiplication and division

sharing doubling
halving
number patterns

Measurement

measure
size
compare
guess, estimate
enough, not enough
too much, too little
too many, too few
nearly, close to, about the same as
just over, just under

Length

metre
length, height, width, depth
long, short, tall
high, low
wide, narrow
thick, thin
longer, shorter, taller, higher ... and so on
longest, shortest, tallest, highest ... and so on
far, near, close

Weight

weigh, weighs, balances
heavy, light
heavier than, lighter than
heaviest, lightest
scales

Capacity and Volume

full and half full
empty
holds
container

Time

days of the week, Monday, Tuesday ... day, week
birthday, holiday
morning, afternoon, evening, night bedtime, dinner time, playtime
today, yesterday, tomorrow
before, after
next, last
now, soon, early, late
quick, quicker, quickest, quickly
slow, slower, slowest, slowly
old, older, oldest
new, newer, newest
takes longer, takes less time
hour, o'clock
clock, watch, hands

Money

coin
penny, pence, pound price, cost
buy, sell
spend, spent
pay

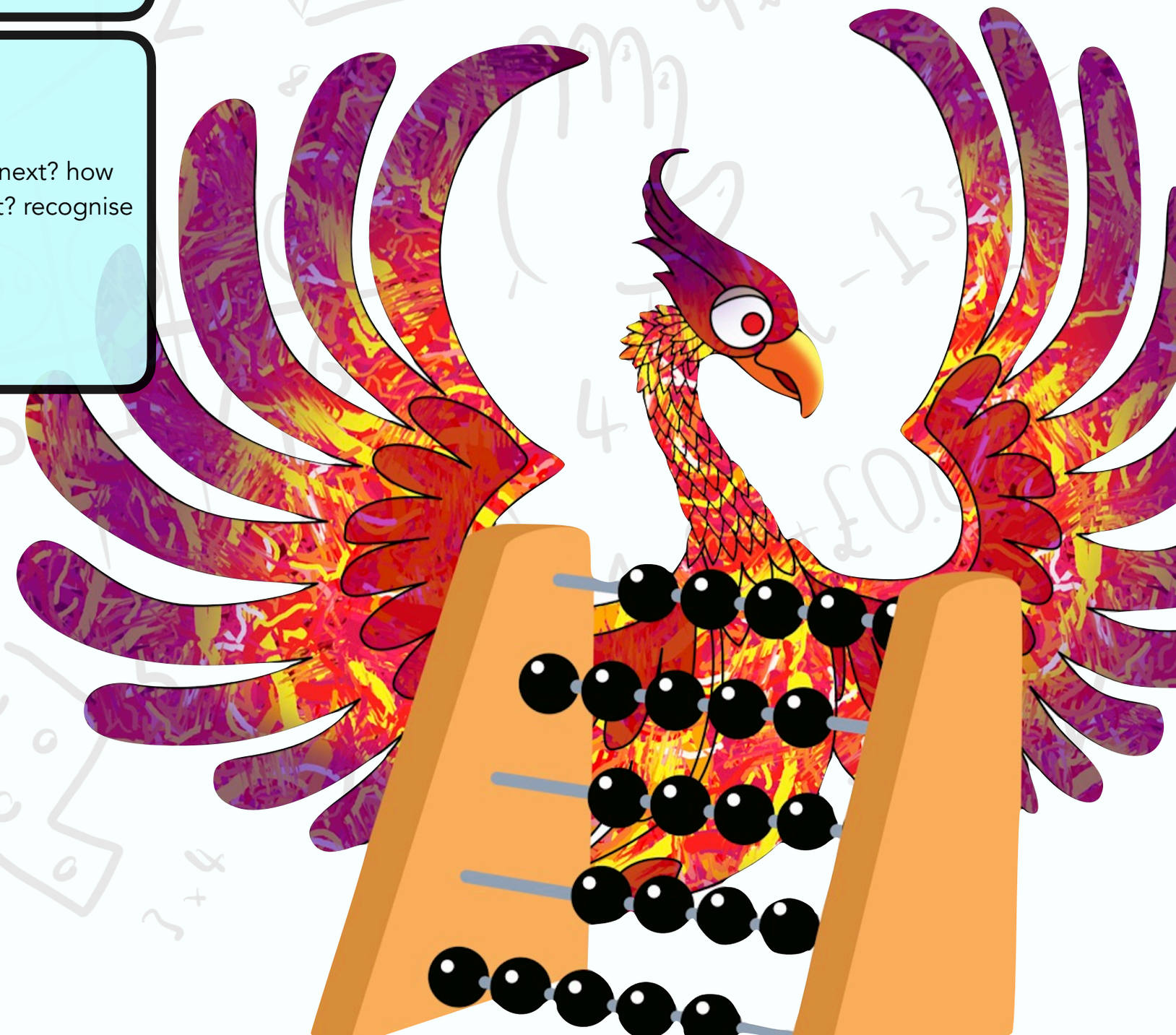
Mathematical Language EYFS

Properties of shape
shape, pattern flat
curved, straight round
hollow, solid
sort
make, build, draw size
bigger, larger, smaller
symmetrical
pattern, repeating pattern
match
2-D shape
corner, side
rectangle (including square)
circle
triangle
3-D shape
corner, side
rectangle (including square)
circle
triangle

Position and direction
over, under, above, below
top, bottom, side, on, in
outside, inside, around
in front, behind
front, back
beside, next to
opposite
apart
between
middle, edge
corner
direction
left, right
up, down
forwards, backwards, sideways

Statistics
count,
sort
group, set
list

General
pattern
puzzle
what could we try next? how did you work it out? recognise
describe
draw
compare
sort



Year 1

Road Map

Term 1

Number and Place Value: Up to 30

Geometry: Properties of Shapes

Addition and Subtraction

Term 2

Number and Place Value: ~~Place Value:~~ Up to 100

Addition and subtraction: Facts of 7 - 11

Term 3

Geometry: Properties of Shapes

Addition and Subtraction: Facts of 11 - 16

Measurement: Length

Term 4

Addition and Subtraction: Facts of 17-20

Geometry: Position and Direction

Measurement: Time

Term 5

Addition and Subtraction

Fractions

Term 6

Multiplication and Division

Measurement: Money

Measurement: Mass and Capacity

Mathematical Language Year 1

Number and Place value
numeral
twenty-one, twenty-two ...
one hundred
forwards
backwards
equal to
equivalent to
most, least
many
odd, even
multiple of
half-way between
above, below

Estimating
roughly

Addition and Subtraction
addition
near double
half, halve
subtract
equals
is the same as
number bonds/[airs
missing number

Multiplication and division
multiplication
multiply
multiplied by
multiple
division
dividing
grouping
array

Length
centimetre
ruler
metre stick

Weight
kilogram

Capacity and volume
litre, half litre capacity volume
more than
less than
quarter full

Time
months of the year (January, February ...) seasons: spring, summer, autumn, winter day, week, weekend, month, year
earlier, later
first
midnight
date
how long ago?
how long will it be to ...?
how long will it take to ...?
how often?
always, never, often, sometimes
usually
once, twice
half past, quarter past, quarter to
clock face, a hour hand, minute hand
hours, minutes

Money
change
dear, costs more
cheap, costs less,
cheaper costs the same
as
how much ...?
how many ...?
total

Fractions
fraction
equal part
equal grouping
equal sharing
parts of a whole
half
one of two equal parts quarter
one of four equal parts

Geometry

Properties of shape
symmetry, symmetrical
pattern

2-D shape
point, pointed

3-D shape
cuboid
cylinder

Position and direction
underneath
centre
journey
quarter turn, three-quarter turn

General
problem
problem solving
mental, mentally
explain your thinking

Year 2

Road Map

Term 1

Number and Place Value

Geometry: Properties of Shapes

Addition and Subtraction: Addition

Term 2

Addition and Subtraction: Subtraction

Geometry: Properties of Shapes

Term 3

Multiplication and Division

Geometry: Position and Direction

Multiplication and Division (Multiplication Tables)

Term 4

Measurement: Length and Mass

Fractions

Measurement: Time

Term 5

Measurement Money

Statistics

Measurement: Capacity and Temperature

Term 6

Place Value: Secure

Addition and Subtraction: Secure

Multiplication and Division: Secure

Mathematical Language Year 2

Number and Place value
two hundred…one thousand
count in… threes, fours and so on
tally
sequence
continue
predict
rule
> greater than
< less than
hundreds
one-, two- or three-digit
place, place value
represents
Exchange

Estimating
exact, exactly

Addition and Subtraction
one hundred or more
one hundred or less
number facts
tens boundary

Multiplication and division
groups of times
once, twice, three times ... ten times repeated addition
divide, divided by, divided into
share, share equally
left, left over
one each, two each, three each ... ten each group in
pairs, threes ... tens
equal groups of
row, column

Length
further, furthest
Tape measure

Weight
gram
measuring scale

Capacity and volume
millilitre
contains

Time
fortnight
5, 10, 15 minutes past
digital/analogue clock/watch, timer
seconds

Money
bought, sold

Fractions
equivalent fraction mixed number numerator, denominator
two halves
two quarters, three quarters
one third, two thirds,
one of three equal parts

Geometry

Properties of shape
surface
line symmetry

2-D shape
rectangular
Circular
triangular
pentagon, hexagon, octagon

3-D shape
cuboid
cylinder

General
problem
problem solving
mental, mentally
explain your thinking
explain your method
describe the pattern
describe the rule
investigate
mental calculation
written calculation

Position and direction
underneath
centre
journey
quarter turn, three-quarter turn

Statistics
vote
table

Year 3

Road Map

Term 1
- Number and Place Value

Term 2
- Geometry: Properties of Shapes
- Multiplication and Division: Multiplication Tables
- Addition and Subtraction: Mental Methods: Addition

Term 3
- Fractions
- Addition and Subtraction: Mental Methods: Subtraction

Term 4
- Addition and Subtraction: Written Methods Addition
- Addition and Subtraction: Written Methods Subtraction
- Multiplication and Division

Term 5
- Measurement: Money
- Fractions: Calculating

Term 6
- Measurement: Time
- Measurement: Length, Mass and Capacity
- Geometry: Properties of Shapes (Angles)
- Statistics

Mathematical Language Year 3

Number and Place value
count in fours, eights, fifties and so on to hundreds
multiple of, factor of
relationship
Roman numerals
one more, ten more, one hundred
more one less, ten less, one hundred less

Estimating
approximate, approximately
round, nearest, round to the nearest ten, hundred
round up, round down

Addition and Subtraction
one more, two more ... ten more ... one hundred more
hundreds boundary

Multiplication and division
multiple, factor
product
left over, remainder

Fractions
sixths, sevenths, eighths, tenths ...

Measurement
measuring scale, division
approximately

Length
centimetre
ruler
metre stick

Weight
No new vocabulary

Capacity and volume
No new vocabulary

Time
century
calendar, date
earliest, latest
a.m., p.m.
Roman numerals
12-hour clock time, 24-hour clock time

Temperature
centigrade

Money
No new vocabulary

Geometry
Properties of shape
perimeter

2-D shape
pentagon, pentagonal
hexagon, hexagonal
octagon, octagonal
quadrilateral
right-angled
parallel, perpendicular

3-D shape
hemisphere
prism, triangular prism

Position and direction
compass point
north, south, east, west, N, S, E, W
horizontal, vertical, diagonal
angle ... is a greater/smaller angle than
acute angle
obtuse angle

Statistics
list, table, chart, bar chart, frequency table
Carroll diagram, Venn diagram
label, title, axis, axes
diagram

General
greatest value, least value
statement

Year 4

Road Map

Term 1

Number and Place Value

Geometry: Properties of Shapes

Term 2

Multiplication and Division: including Multiplication Tables

Addition and Subtraction: Mental Methods Addition

Addition and Subtraction: Mental Methods Subtraction

Term 3

Multiplication and Division: Multiplication Tables

Addition and Subtraction: Written Methods Addition

Term 4

Addition and Subtraction: Written Methods Subtraction

Multiplication and Division

Geometry: Properties of Shapes (Angles)

Term 5

Decimals

Measurement: Converting Units

Term 6

Fractions

Fractions: Caculating

Addition and Subtraction: Decimals

Measurement: Time

Measurement: Perimeter and Area

Geometry: Position and Direction

Statistics

Mathematical Language Year 4

Number and Place value
one thousand ... ten thousand, hundred thousand, million
count in sixes, sevens, nines, twenty-fives and so on to hundreds,
thousands equal to equivalent to is the same as more, less
most, least tally
next, consecutive
Roman numerals
integer, positive, negative
above/below zero, minus
negative numbers
one thousand more
one thousand less

Estimating
approximate, approximately
round, nearest, round to the nearest ten, hundred
round up, round down

Addition and Subtraction
Inverse

Multiplication and division
inverse
square, squared
cube, cubed

Fractions (including decimals)
hundredths
decimal, decimal fraction, decimal point, decimal place, decimal equivalent
proportion

Measurement
unit, standard unit
metric unit

Length
breadth
edge, perimeter
area, covers
square centimetre (cm2)

Weight
mass: big, bigger, small, smaller
weight: heavy/light, heavier/ lighter, heaviest/ lightest

Capacity and volume
measuring cylinder

Time
leap year, millennium
noon
date of birth
timetable, arrive, depart
Roman numerals

Temperature
No new vocabulary

Money
No new vocabulary

Geometry

Properties of shape
line
construct
sketch
centre
angle, right-angled
base, square-based
reflect, reflection
regular, irregular

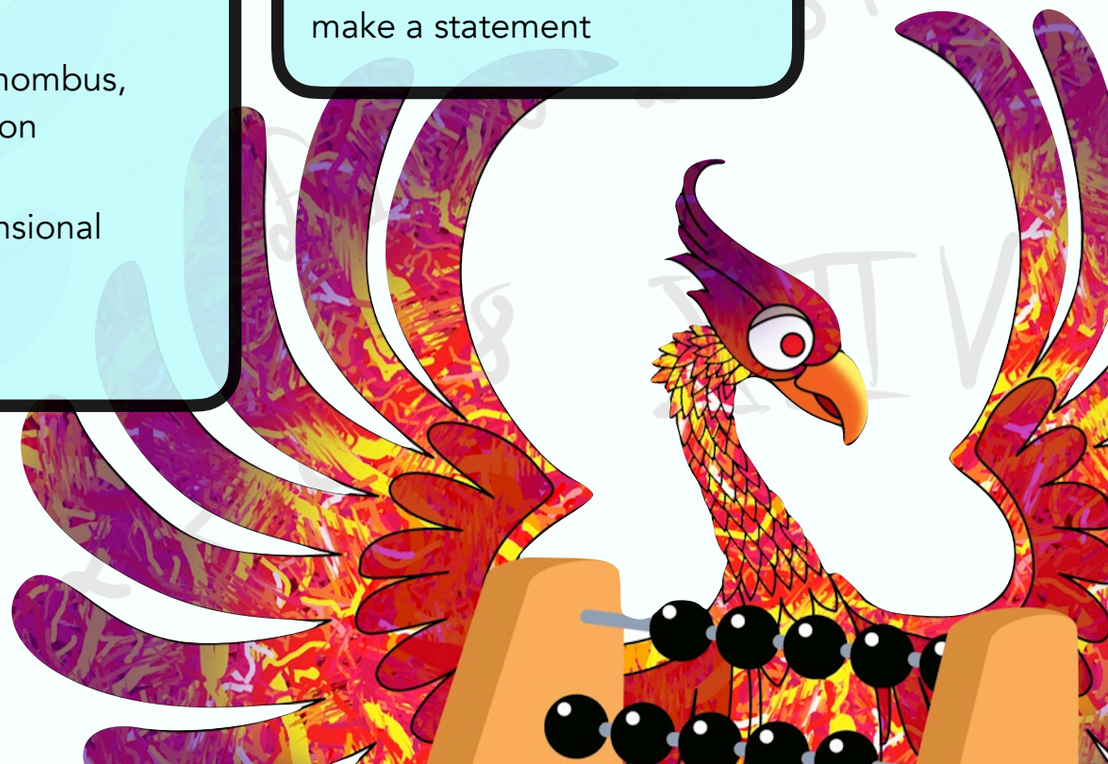
2-D shape
2-D, two-dimensional
oblong
rectilinear
equilateral triangle, isosceles triangle, scalene triangle
heptagon
octagon, octagonal
quadrilateral
parallelogram, rhombus, trapezium polygon

3-D shape
3-D, three-dimensional
spherical

Position and direction
north-east, north-west, south-east, south-west, NE, NW, SE, SW
horizontal, vertical, diagonal
translate, translation
rotate, rotation
degree
reflection
ruler, set square
angle measurer, compass

Statistics
survey, questionnaire, data

General
justify
make a statement



Year 5

Road Map

Term 1
- Number and Place Value
- Decimals
- Geometry: Properties of Shapes

Term 2
- Addition and Subtraction
- Multiplication and Division: Powers of 10

Term 3
- Multiplication and Division: Properties of Number
- Multiplication and Division: Written Methods
- Geometry: Position and Direction

Term 4
- Fractions, Decimals, and Percentages
- Measurement: Length, Mass, and Capacity

Term 5
- Fractions: Calculating
- Measurement: Area and Volume

Term 6
- Geometry: Properties of Shapes (Angles)
- Statistics

Mathematical Language Year 5

Number and Place value
factor pair
≥ greater than or equal to
≤ less than or equal to
formula
divisibility
square number
prime number
ascending/descending order

Estimating
round to the nearest ten thousand

Addition and Subtraction
ones boundary, tenths boundary

Multiplication and division
No new vocabulary

Fractions (including decimals)
proper/improper fraction
equivalent fraction
equivalent, reduced to, cancel
sixths, sevenths, eighths, tenths ... thousandths
proportion, in every, for every
percentage, per cent, %

Measurement
imperial unit

Length
square centimetre (cm2), square metre (m2), square millimetre (mm2)

Weight
No new vocabulary

Capacity and volume
pint, gallon

Time
No new vocabulary

Temperature
No new vocabulary

Money
discount
currency

Geometry

Properties of shape
centre, radius, diameter
congruent
axis of symmetry, reflective symmetry

2-D shape
x-axis, y-axis, quadrant

3-D shape
octahedron

Position and direction
coordinate
protractor

Statistics
database
bar line chart
line graph
maximum/minimum value
outcome

General
explain your reasoning

Year 6

Road Map

Term 1

Number and Place Value

Multiplication and Division

Addition, Subtraction, Multiplication, and Division

Geometry: Position and Direction

Term 2

Fractions, Decimals, and Percentages

Geometry: Properties of Shapes (Angles)

Term 3

Addition, Subtraction, Multiplication, and Division

Fractions: Calculating

Decimals: Calculating

Term 4

Ratio and Proportion

Measurement: Converting Units

Measurement: Area and Volume

Term 5

Algebra

Statistics

Term 6

Targeted Revision and SATs

Fractions, Decimals, and Percentages: Secure

Algebra: Secure

Ratio and Proportion: Secure

Mathematical Language Year 6

Number and Place value
prime number
factorise
prime factor
digit total

Estimating
No new vocabulary

Addition and Subtraction
No new vocabulary
Multiplication and division
No new vocabulary
Fractions (including decimals)
ratio

Algebra
formula, formulae
equation
unknown
variable

Measurement

Length
yard, foot, feet, inch, inches
circumference
Weight
tonne, pound, ounce

Capacity and volume
centilitre
cubic centimetres(cm3), cubic metres (m3),
cubic millimetres (mm3), cubic kilometres (km3)

Time
Greenwich Mean Time, British Summer Time, International Date Line

Temperature
temperature degree centigrade

Money
profit, loss

Geometry
Properties of shape
circumference, concentric, arc
net, open, closed
intersecting, intersection
plane
base, square-based
size

2-D shape
kite

3-D shape
dodecahedron
net, open, closed

Position and direction
reflex angle

Statistics
pie chart
mean (mode, median, range as estimates for this)
statistics, distribution