Mathematical Vocabulary Checklists YEAR 4

### Numbers and the number system

#### PLACE VALUE, ORDERING AND ROUNDING

units, ones tens. hundreds. thousands ten thousand, hundred thousand, million digit, one-, two-, three- or four-digit number numeral 'teens' number place, place value stands for, represents exchange the same number as, as many as equal to Of two objects/amounts: >, greater than, more than, larger than, bigger than <, less than, fewer than, smaller than Of three or more objects/amounts: greatest, most, largest, biggest least, fewest, smallest one... ten... one hundred... one thousand more/less compare, order, size first... tenth... twentieth last, last but one before, after next between, half-way between quess how many, estimate nearly, roughly, close to, about the same as approximate, approximately just over, just under exact, exactly too many, too few, enough, not enough round (up or down), nearest round to the nearest ten round to the nearest hundred integer, positive, negative above/below zero, minus

#### PROPERTIES OF NUMBERS AND NUMBER SEQUENCES

number, count, how many...? odd, even every other how many times? multiple of digit next, consecutive sequence continue predict pattern, pair, rule relationship sort, classify, property

#### FRACTIONS AND DECIMALS

part, equal parts fraction one whole half, quarter, eighth third, sixth fifth, tenth, twentieth proportion, in every, for every decimal, decimal fraction decimal point, decimal place

### **Calculations**

#### **ADDITION AND SUBTRACTION**

add, addition, more, plus, increase sum, total, altogether score double, near double how many more to make...? subtract, subtraction, take (away), minus, decrease leave, how many are left/left over? difference between half, halve how many more/fewer is... than...? how much more/less is...? equals, sign, is the same as tens boundary, hundreds boundary inverse

#### **MULTIPLICATION AND DIVISION**

lots of, groups of times, multiply, multiplication, multiplied by multiple of, product once, twice, three times... ten times... times as (big, long, wide... and so on) repeated addition array row, column double, halve share, share equally one each, two each, three each... group in pairs, threes... tens equal groups of divide, division, divided by, divided into remainder factor, quotient, divisible by inverse

# Solving problems

#### MAKING DECISIONS AND REASONING

pattern, puzzle calculate, calculation mental calculation method jotting answer right, correct, wrong what could we try next? how did you work it out? number sentence sign, operation, symbol, equation

#### MONEY

money coin, note penny, pence, pound (£) price, cost buy, bought, sell, sold spend, spent pay change dear, costs more, more/most expensive cheap, costs less, cheaper, less/least expensive how much...? how many...? total, amount value, worth

### Handling data

count, tally, sort, vote survey, questionnaire, data graph, block graph, pictogram represent group, set list, chart, bar chart, tally chart table, frequency table Carroll diagram, Venn diagram label, title, axis, axes diagram most popular, most common least popular, least common

## Measures, shape and space

#### **MEASURES (GENERAL)**

measure, measurement size compare unit, standard unit metric unit, imperial unit measuring scale, division guess, estimate enough, not enough too much, too little too many, too few nearly, roughly, about, close to about the same as, approximately just over, just under

#### LENGTH

length, width, height, depth, breadth long, short, tall, high, low wide, narrow, deep, shallow, thick, thin longer, shorter, taller, higher... and so on longest, shortest, tallest, highest... and so on far, further, furthest, near, close distance apart/between, distance to... from... edge, perimeter kilometre (*km*), metre (*m*) centimetre (*cm*), millimetre (*mm*) mile ruler, metre stick, tape measure

#### MASS

mass: big, bigger, small, smaller, balances weight: heavy/light, heavier/lighter, heaviest/lightest weigh, weighs kilogram (kg), half-kilogram, gram (g) balance, scales

#### CAPACITY

capacity full, half full empty holds, contains litre (*l*), half-litre, millilitre (*ml*) pint container, measuring cylinder

#### AREA

area, covers, surface square centimetre (*cm*<sup>2</sup>)

#### TIME

time

days of the week: Monday, Tuesday... months of the year: January, February... seasons: spring, summer, autumn, winter day, week, fortnight, month year, leap year, century, millennium weekend, birthday, holiday calendar, date, date of birth morning, afternoon, evening, night

# YEAR 4

am, pm, noon, midnight today, yesterday, tomorrow before, after, next, last now, soon, early, late, earliest, latest quick, quicker, quickest, quickly fast, faster, fastest, slow, slower, slowest, slowly old, older, oldest, new, newer, newest takes longer, takes less time how long ago? how long will it be to ...? how long will it take to ...? timetable, arrive, depart hour, minute, second o'clock, half past, guarter to, guarter past clock, watch, hands digital/analogue clock/watch, timer how often? always, never, often, sometimes, usually

#### **SHAPE AND SPACE**

shape, pattern flat, line curved, straight round hollow, solid corner point, pointed face, side, edge, end sort make, build, construct, draw, sketch centre, radius, diameter net surface angle, right-angled base, square-based vertex, vertices layer, diagram regular, irregular concave, convex open, closed

#### **3D SHAPES**

3D, three-dimensional cube cuboid pyramid sphere, hemi-sphere, spherical cone cylinder, cylindrical prism tetrahedron, polyhedron

#### **2D SHAPES**

2D, two-dimensional circle, circular, semi-circle triangle, triangular equilateral triangle, isosceles triangle square rectangle, rectangular, oblong pentagon, pentagonal hexagon, hexagonal heptagon octagon, octagonal polygon quadrilateral

#### PATTERNS AND SYMMETRY

size bigger, larger, smaller symmetrical line of symmetry, line symmetry fold match mirror line, reflection, reflect pattern, repeating pattern, translation

#### POSITION, DIRECTION AND MOVEMENT

position over, under, underneath above, below, top, bottom, side on, in, outside, inside, around in front, behind, front, back before, after, beside, next to opposite, apart between, middle, edge, centre corner direction journey, route, map, plan left, right up, down, higher, lower forwards, backwards, sideways, across close, far, near along, through, to, from, towards, away from ascend, descend grid row, column origin, coordinates clockwise, anti-clockwise compass point, north, south, east, west (N, S, E, W) north-east, north-west, south-east, south-west (NE, NW, SE, SW) horizontal, vertical, diagonal movement slide, roll whole turn, half turn, guarter turn, rotate angle, ... is a greater/smaller angle than right angle degree straight line stretch, bend ruler, set square angle measurer, compasses

### Instructions

listen, join in, say, recite think, imagine, remember start from, start with, start at look at, point to, show me

put, place arrange, rearrange change, change over split, separate

carry on, continue, repeat what comes next? predict describe the pattern, describe the rule

find, find all, find different investigate

choose, decide collect

use, make, build, construct

tell me, describe, name, pick out discuss, talk about explain explain your method explain how you got your answer give an example of... show how you... show your working justify make a statement

read, write, record write in figures present, represent interpret trace, copy complete, finish, end

fill in, shade, colour label, plot

tick, cross draw, sketch draw a line between, join (up), ring, arrow

cost, count, tally

calculate, work out, solve investigate, question answer check

## General

same, different missing number/s number facts, number pairs, number bonds greatest value, least value

number line, number track number square, hundred square number cards, number grid abacus counters, cubes, blocks, rods die, dice dominoes pegs, peg board, pin board geo-strips

same way, different way best way, another way in order, in a different order

not all, every, each