# Mathematical Vocabulary Checklist & Questioning



Fun, Respect & Friendship



# **Reception to Year 6**

# Questions help to extend children's thinking

Ask children who are getting started with a piece of work:

How are you going to tackle this?

What information do you have? What do you need to find out or do?

What operation/s are you going to use?

Will you do it mentally, with pencil and paper, using a number line, with a calculator...? Why?

What method are you going to use? Why? What

equipment will you need?

What questions will you need to ask?

How are you going to record what you are doing?

What do you think the answer or result will be? Can you estimate or predict?

Make positive interventions to check progress while children are working, by asking:

Can you explain what you have done so far? What else is there to do?

Why did you decide to use this method or do it this way?

Can you think of another method that might have worked?

Could there be a quicker way of doing this? What do

you mean by ...?

What did you notice when ...?

Why did you decide to organise your results like that?

Are you beginning to see a pattern or a rule?

Do you think that this would work with other numbers?

Have you thought of all the possibilities? How can you be sure?

Ask children who are stuck:

Can you describe the problem in your own words?

Can you talk me through what you have done so far?

What did you do last time? What is different this time?

Is there something that you already know that might help?

Could you try it with simpler numbers... fewer numbers... using a number line...?

What about putting things in order?

Would a table help, or a picture/diagram/graph? Why

not make a guess and check if it works?

Have you compared your work with anyone else's?

During the plenary session of a lesson ask:

How did you get your answer?

Can you describe your method/pattern/rule to us all? Can you explain why it works?

What could you try next?

Would it work with different numbers?

What if you had started with... rather than ...? What

if you could only use ...?

Is it a reasonable answer/result? What makes you say so?

How did you check it?

What have you learned or found out today?

If you were doing it again, what would you do differently?

Having done this, when could you use this method/information/idea again?

Did you use any new words today? What do they mean? How do you spell them?

What are the key points or ideas that you need to remember for the next lesso

# Counting and recognising numbers

### COUNTING

number zero, one, two, three... to twenty and beyond zero, ten, twenty... one hundred none how many...? count, count (up) to count on (from, to) count back (from, to) count in ones, twos... tens... more, less, many, few odd, even every other how many times? pattern, pair guess how many, estimate nearly, close to, about the same as just over, just under too many, too few, enough, not enough

### **COMPARING AND ORDERI NG NUMBERS**

the same number as, as many as Of two objects/amounts: greater, more, larger, bigger less, fewer, smaller Of three or more objects/amounts: greatest, most, biggest, largest least, fewest, smallest one more, ten more one less, ten less compare order size first, second, third... tenth last, last but one before, after next between above, below

# Adding and subtracting

add, more, and make, sum, total altogether score double one more, two more, ten more... how many more to make... ? how many more is... than...? take (away), leave how many are left/left over? how many have gone? one less, two less... ten less... how many fewer is... than...? difference between is the same as

# Solving problems

### **REASO NING ABOUT NUMBERS OR SHAPES**

pattern puzzle answer right, wrong what could we try next? how did you work it out? count, sort group, set match same, different list

### PROBLEMS INVOLVING 'REAL LIFE'

**OR MONEY** 

compare double half, halve pair count out, share out left, left over

money coin penny, pence, pound price cost buy sell spend, spent pay change dear, costs more cheap, costs less, cheaper costs the same as how much...? how many...? total

# Measures, shape and space

### MEASURES (GENERAL)

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

length, width, height, depth 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, near, close

### MASS

weigh, weighs, balances heavy/light, heavier/lighter, heaviest/lightest balance, scales, weight

### CAPACITY

full half full empty holds container

### TIME

time days of the week: Monday, Tuesday... day, week birthday, holiday morning, afternoon, evening, night bedtime, dinnertime, 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

### **EXPLORING PATTERNS, SHAPE AND SPACE**

shape, pattern flat curved, straight round hollow, solid corner face, side, edge, end sort make, build, draw

### **3D SHAPES**

cube pyramid sphere cone

### **2D SHAPES**

circle triangle square rectangle star

### PATTERNS AND SYMMETRY

size bigger, larger, smaller symmetrical pattern repeating pattern match

### **POSITION, DIRECTIO N AND MOVEMENT**

position over, under 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 corner direction left, right up, down forwards, backwards, sideways across close, far, near along through to, from, towards, away from movement slide roll turn stretch, bend

# Instructions

listen join in say

think imagine remember

start from start with start at

look at point to show me

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

carry on, continue repeat what comes next?

find choose collect

use make build

tell me describe pick out talk about explain show me

read write trace copy complete finish, end

fill in shade colour tick, cross draw draw a line between join (up) ring cost count work out answer check

# General

same number/s different number/s missing number/s number facts

number line, number track number square number cards counters, cubes, blocks, rods die, dice dominoes pegs, peg board

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

# Numbers and the number system

### COUNTING, PROPERTIES OF NUMBERS AND NUMBER SEQUENCES

#### number

zero, one, two, three... to twenty and beyond zero, ten, twenty... one hundred none how many...? count, count (up) to count on (from, to) count back (from, to) count back (from, to) count in ones, twos... tens... more, less, many, few odd, even every other how many times? pattern, pair

### PLACE VALUE AND ORDERI NG

units, ones tens exchange digit 'teens' number the same number as, as many as equal to Of two objects/amounts: greater, more, larger, bigger less, fewer, smaller Of three or more objects/amounts: greatest, most, biggest, largest least, fewest, smallest one more, ten more one less, ten less compare order size first, second, third... tenth, eleventh... twentieth last, last but one before, after next between, half-way between above, below

#### **ESTIMATI NG**

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

# Calculations

### **ADDITION AND SUBTRACTIO N**

+, add, more, plus make, sum, total altogether score double, near double one more, two more... ten more how many more to make ...? how many more is... than ...? how much more is ...? -, subtract, take (away), minus leave 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 half, halve =, equals, sign, is the same as

# **Solving problems**

### MAKI NG DECISIO NS AND REASO NING

pattern puzzle answer right, wrong what could we try next? how did you work it out? count out, share out, left, left over number sentence sign, operation

### MONEY

money coin penny, pence, pound price cost buy sell spend, spent pay change dear, costs more cheap, costs less, cheaper costs the same as how much...? how many...? total

# Organising and using data

count, sort, vote group, set list same, different table

### Measures, shape and space

### **MEASURES (GENERAL)**

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

### LENGTH

length, width, height, depth 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, near, close metre ruler, metre stick

### MASS

weigh, weighs, balances heavy/light, heavier/lighter, heaviest/lightest balance, scales, weight

### CAPACITY

full half full empty holds container

### TIME

time days of the week: Monday, Tuesday... seasons: spring, summer, autumn, winter day, week, month, year weekend, birthday, holiday morning, afternoon, evening night, midnight bedtime, dinnertime, playtime today, yesterday, tomorrow before, after next. last now, soon, early, late quick, quicker, quickest, quickly fast, faster, fastest slow, slower, slowest, slowly old, older, oldest new, newer, newest takes longer, takes less time hour, o'clock, half past clock, watch, hands how long ago? how long will it be to ...? how long will it take to ...? how often? always, never, often, sometimes, usually once, twice

### SHAPE AND SPACE

shape, pattern flat curved, straight round hollow, solid corner point, pointed face, side, edge, end sort make, build, draw

### **3D SHAPES**

cube cuboid pyramid sphere cone cylinder

### **2D SHAPES**

circle triangle square rectangle star

### PATTERNS AND SYMMETRY

size bigger, larger, smaller symmetrical pattern repeating pattern match

### **POSITION, DIRECTIO N 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 left, right up, down forwards, backwards, sideways across close, far, near along through to, from, towards, away from movement slide roll turn, whole turn, half turn stretch, bend

# Instructions

listen join in say

think imagine remember

start from start with start at

look at point to show me

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

carry on, continue repeat what comes next?

find choose collect

use make build

tell me describe pick out talk about explain show me

read write record trace copy complete finish, end

fill in shade colour

tick, cross draw draw a line between join (up) ring arrow cost count work out answer check

# General

same number/s different number/s missing number/s number facts

number line, number track number square number cards abacus counters, cubes, blocks, rods die, dice dominoes pegs, peg board

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

# Numbers and the number system

### COUNTING, PROPERTIES OF NUMBERS AND NUMBER SEQUENCES

### number

zero, one, two, three... to twenty and beyond zero, ten, twenty... one hundred zero, one hundred, two hundred... one thousand none how many...? count, count (up) to count on (from, to) count back (from, to) count in ones, twos, threes, fours, fives... count in tens more, less, many, few tally odd, even every other how many times? multiple of sequence continue predict pattern, pair, rule

### PLACE VALUE AND ORDERI NG

units. ones tens, hundreds diait one-, two- or three-digit number 'teens' number place, place value stands for, represents exchange the same number as, as many as equal to Of two objects/amounts: greater, more, larger, bigger less, fewer, smaller Of three or more objects/amounts: greatest, most, biggest, largest least, fewest, smallest one more, ten more one less, ten less compare order size first, second, third... tenth... twentieth twenty-first, twenty-second... last, last but one before, after next between, half-way between above, below

### **ESTIMATI NG**

guess how many, estimate nearly, roughly, close to about the same as just over, just under exact, exactly too many, too few, enough, not enough round, nearest, round to the nearest ten

### **FRACTIO NS**

part, equal parts fraction one whole one half, two halves one quarter, two... three... four quarters

# Calculations

### **ADDITION AND SUBTRACTIO N**

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

### MULTIPLICATION AND DIVISION

lots of, groups of ×, times, multiply, multiplied by multiple of 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, divided by, divided into left, left over

# Solving problems

### MAKI NG DECISIO NS AND REASO NING

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

### MONEY

money coin penny, pence, pound (£) price, cost buy, bought, sell, sold spend, spent pay change dear, costs more cheap, costs less, cheaper how much...? how many...? total

# Organising and using data

count, tally, sort, vote graph, block graph, pictogram represent group, set same, different list, table label, title most popular, most common least popular, least common

### Measures, shape and space

### **MEASURES (GENERAL)**

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

### LENGTH

length, width, height, depth 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 metre (*m*), centimetre (*c m*) ruler, metre stick, tape measure

### MASS

weigh, weighs, balances heavy/light, heavier/lighter, heaviest/lightest kilogram (*k* g), half-kilogram, gram (g) balance, scales, weight

### CAPACITY

capacity full, half full empty holds, contains litre (1), half-litre, millilitre (m 1) container

### TIME

time

days of the week: Monday, Tuesday... months of the year: January, February... seasons: spring, summer, autumn, winter day, week, fortnight, month, year weekend, birthday, holiday morning, afternoon, evening, night, midnight bedtime, dinnertime, playtime today, yesterday, tomorrow before, after next, last now, soon, early, late 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 ...? hour, minute, second o'clock, half past, quarter to, quarter past clock, watch, hands digital/analogue clock/watch, timer how often? always, never, often, sometimes, usually once, twice

### SHAPE AND SPACE

shape, pattern flat, curved, straight round hollow, solid corner point, pointed face, side, edge, end sort make, build, draw surface

### **3D SHAPES**

cube cuboid pyramid sphere cone cylinder

### **2D SHAPES**

circle, circular triangle, triangular square rectangle, rectangular star pentagon hexagon octagon

### PATTERNS AND SYMMETRY

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

### **POSITION, DIRECTIO N 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 left, right up, down higher, lower forwards, backwards, sideways across close, far, near along through to, from, towards, away from clockwise, anti-clockwise movement slide roll whole turn, half turn, quarter turn right angle straight line stretch, bend

# Instructions

listen join in say recite

think imagine remember

start from start with start at

look at point to show me

put, place fit 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

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... read write record write in figures present represent trace copy complete finish, end fill in shade, colour label tick, cross draw draw a line between join (up) ring arrow cost, count, tally calculate work out solve answer check General same, different missing number/s number facts number pairs number bonds

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

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

# Numbers and the number system

### COUNTING, PROPERTIES OF NUMBERS AND NUMBER SEQUENCES

### number

zero, one, two, three... to twenty and beyond zero, ten, twenty... one hundred zero, one hundred, two hundred... one thousand none how many...? count, count (up) to count on (from, to) count back (from, to) count in ones, twos, threes, fours, fives... count in tens, hundreds more, less, many, few tally odd, even every other how many times? multiple of sequence continue predict pattern, pair, rule relationship

### PLACE VALUE AND ORDERI NG

units. ones tens, hundreds digit one-, two- or three-digit number 'teens' number place, place value stands for, represents exchange the same number as, as many as equal to Of two objects/amounts: greater, more, larger, bigger less, fewer, smaller Of three or more objects/amounts: greatest, most, biggest, largest least, fewest, smallest one more, ten more, one hundred more one less, ten less, one hundred less compare order size first, second, third... tenth... twentieth twenty-first, twenty-second... last, last but one before, after next between, half-way between above, below

### **ESTIMATI NG**

guess how many, estimate nearly, roughly, close to approximate, approximately about the same as just over, just under exact, exactly too many, too few, enough, not enough round (up or down) nearest, round to the nearest ten

### **FRACTIO NS**

part, equal parts fraction one whole one half, two halves one quarter, two... three... four quarters one third, two thirds, three thirds one tenth

# Calculations

### ADDITION AND SUBTRACTIO N

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

### **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 left, left over, remainder

# **Solving problems**

### MAKI NG DECISIO NS AND REASO NING

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 graph, block graph, pictogram represent group, set list, chart, bar 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 size compare 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 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... kilometre (*km*), metre (*m*), centimetre (*c m*) mile ruler, metre stick, tape measure

### MASS

weigh, weighs, balances heavy/light, heavier/lighter, heaviest/lightest kilogram (k g), half-kilogram, gram (g) balance, scales, weight

#### CAPACITY

capacity full, half full empty holds, contains litre (*l*), half-litre, millilitre (*m l*) container

#### TIME

#### time

days of the week: Monday, Tuesday... months of the year: January, February... seasons: spring, summer, autumn, winter day, week, fortnight, month, year, century weekend, birthday, holiday calendar, date morning, afternoon, evening, night, midnight am, pm bedtime, dinnertime, playtime 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 ...? hour, minute, second o'clock, half past, quarter to, quarter past clock, watch, hands digital/analogue clock/watch, timer how often? always, never, often, sometimes, usually once, twice

### SHAPE AND SPACE

shape, pattern flat, curved, straight round hollow, solid corner point, pointed face, side, edge, end sort make, build, draw surface right-angled vertex, vertices layer, diagram

### **3D SHAPES**

cube cuboid pyramid sphere, hemi-sphere cone cylinder prism

### **2D SHAPES**

circle, circular, semi-circle triangle, triangular square rectangle, rectangular star pentagon, pentagonal hexagon, hexagonal octagon, octagonal quadrilateral

### **PATTERNS AND SYMMETRY**

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

### **POSITION, DIRECTIO N 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 clockwise, anti-clockwise compass point north, south, east, west (N, S, E, W) horizontal, vertical diagonal movement slide roll whole turn, half turn, quarter turn angle, ... is a greater/smaller angle than right angle straight line stretch, bend

# Instructions

listen join in say recite

think imagine remember

start from start with start at

look at point to show me

put, place fit 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

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

read write record write in figures represent interpret trace copy complete finish, end fill in shade, colour label

present

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 geo-strips

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

# Numbers and the number system

### PLACE VALUE, ORDERI NG 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 guess 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

### FRACTIO NS 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 SUBTRACTIO N**

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**

### MAKI NG DECISIO NS AND REASO NING

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 (c m), 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 (1), half-litre, millilitre (m 1) pint container, measuring cylinder

#### AREA

area, covers, surface square centimetre (*c m*<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

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, quarter to, quarter 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 laver, 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, DIRECTIO N 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

# Numbers and the number system

### PLACE VALUE, ORDERI NG 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  $\geq$ , greater than or equal to  $\leq$ , less than or equal to Of three or more objects/amounts: greatest, most, largest, biggest least, fewest, smallest one... ten... one hundred... one thousand more/less compare, order, size ascending/descending order first... tenth... twentieth last, last but one before, after, next between, half-way between guess how many, estimate nearly, roughly, close to, about the same as approximate, approximately  $\approx$ , is approximately equal to just over, just under exact, exactly too many, too few, enough, not enough round (up or down), nearest round to the nearest ten/hundred round to the nearest thousand 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 formula divisible (by), divisibility, factor square number one squared, two squared...  $(1^2, 2^2...)$ 

# FRACTIO NS, DECIMALS, PERCENTAGES, RATIO AND PROPORTION

part, equal parts fraction, proper/improper fraction mixed number numerator, denominator equivalent, reduced to, cancel one whole half, quarter, eighth third, sixth, ninth, twelfth fifth, tenth, twentieth, hundredth proportion, ratio in every, for every to every, as many as decimal, decimal fraction decimal point, decimal place percentage, per cent, %

# Calculations

### ADDITION AND SUBTRACTIO N

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 units boundary, tenths 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

### **USING A CALCULATOR**

calculator display, key, enter, clear constant

# **Solving problems**

### MAKI NG DECISIO NS AND REASO NING

pattern, puzzle calculate, calculation mental calculation method, strategy 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 discount currency

# Handling data

count, tally, sort, vote survey, questionnaire data, database graph, block graph, line graph pictogram, represent group, set list, chart, bar chart, bar line chart tally chart table, frequency table Carroll diagram, Venn diagram label, title, axis, axes diagram most popular, most common least popular, least common mode, range maximum/minimum value classify, outcome

### PROBABILITY

fair, unfair likely, unlikely, likelihood certain, uncertain probable, possible, impossible chance, good chance poor chance, no chance risk, doubt

### 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 (*c m*), 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 ( $k_g$ ), half-kilogram, gram (g) balance, scales

### CAPACITY

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

### **AREA**

area, covers, surface square centimetre  $(c m^2)$ , square metre  $(m^2)$ square millimetre  $(m m^2)$ 

### 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 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, quarter to, quarter past clock, watch, hands digital/analogue clock/watch, timer 24-hour clock, 12-hour clock 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 congruent 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, octahedron

### **2D SHAPES**

2D, two-dimensional circle, circular, semi-circle triangle, triangular equilateral triangle, isosceles triangle, scalene 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, axis of symmetry line symmetry, reflective symmetry fold match mirror line, reflection, reflect pattern, repeating pattern, translation

### **POSITION, DIRECTIO N 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 parallel, perpendicular x-axis, y-axis quadrant movement slide, roll whole turn, half turn, quarter turn rotate, rotation angle, ... is a greater/smaller angle than right angle, acute, obtuse degree straight line stretch, bend ruler, set square angle measurer, compasses, protractor

### 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, bisect

tell me, describe, name, pick out, identify discuss, talk about explain explain your method/answer/reasoning 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, convert 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, spinner dominoes pegs, peg board, pin board geo-strips

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

# Numbers and the number system

PLACE VALUE, ORDERI NG 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  $\geq$ , greater than or equal to  $\leq$ , less than or equal to Of three or more objects/amounts: greatest, most, largest, biggest least, fewest, smallest one... ten... one hundred... one thousand more/less compare, order, size ascending/descending order first... tenth... twentieth last. last but one before, after next between, half-way between guess how many, estimate nearly, roughly, close to, about the same as approximate, approximately  $\approx$ , is approximately equal to just over, just under exact, exactly too many, too few, enough, not enough round (up or down), nearest round to the nearest ten/hundred/thousand 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 formula divisible (by), divisibility, factor, factorise square number

one squared, two squared... (1, 2...) prime, prime factor

# FRACTIO NS, DECIMALS, PERCENTAGES, RATIO AND PROPORTION

part, equal parts fraction, proper/improper fraction mixed number numerator, denominator equivalent, reduced to, cancel one whole half, quarter, eighth third, sixth, ninth, twelfth fifth, tenth, twentieth hundredth, thousandth proportion, ratio in every, for every to every, as many as decimal, decimal fraction decimal point, decimal place percentage, per cent, %

# Calculations

### ADDITION AND SUBTRACTIO N

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 units boundary, tenths 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

### **USING A CALCULATOR**

calculator, display, key enter, clear, sign change constant, recurring, memory, operation key

# **Solving problems**

### MAKI NG DECISIO NS AND REASO NING

pattern, puzzle calculate, calculation mental calculation method, strategy 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 discount, profit, loss currency

### Handling data

count, tally, sort, vote survey, questionnaire data, database graph, block graph, line graph pictogram, represent group, set list, chart, bar chart, bar line chart tally chart table, frequency table Carroll diagram, Venn diagram label, title, axis, axes diagram most popular, most common least popular, least common mode, range, mean, average, median statistics, distribution maximum/minimum value classify, outcome

### PROBABILITY

fair, unfair likely, unlikely, likelihood, equally likely certain, uncertain probable, possible, impossible chance, good chance, poor chance, no chance equal chance, even chance, fifty-fifty chance risk, doubt biased, random

### 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, circumference kilometre (*km*), metre (*m*) centimetre (*c m*), millimetre (*mm*) mile, yard, feet, foot, inches, inch ruler, metre stick, tape measure, compasses

### MASS

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

### CAPACITY

capacity full, half full, empty holds, contains litre (*l*), half-litre, centilitre (*cl*), millilitre (*m l*) pint, gallon container, measuring cylinder

### AREA

area, covers, surface square centimetre  $(c m^2)$ , square metre  $(m^2)$ square millimetre  $(m m^2)$ 

### 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 am, pm, noon, midnight today, vesterday, 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, quarter to, quarter past clock, watch, hands digital/analogue clock/watch, timer 24-hour clock, 12-hour clock Greenwich Mean Time, British Summer Time International Date Line 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 circumference, concentric, arc net surface angle, right-angled congruent intersecting, intersection plane base, square-based vertex. vertices layer, diagram regular, irregular concave, convex open, closed tangram

### **3D SHAPES**

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

### **2D SHAPES**

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

#### PATTERNS AND SYMMETRY

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

### **POSITION, DIRECTIO N 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 parallel, perpendicular x-axis, y-axis quadrant movement slide, roll whole turn, half turn, quarter turn, rotate, rotation angle, ... is a greater/smaller angle than right angle, acute, obtuse, reflex degree straight line stretch, bend ruler, set square angle measurer, compasses, protractor

### 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 adjusting, adjust 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, bisect

tell me, define, describe, name, pick out, identify discuss, talk about explain explain your method/answer/reasoning 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, convert

investigate, interrogate (data), question, prove answer check

### General

same, identical, 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, spinner dominoes pegs, peg board, pin board geo-strips

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