

# **FORMAT FOR ILPs, REPORTS AND ANNUAL REVIEWS**

## **YEAR 4 LEVEL**

### **NUMBERS AND THE NUMBER SYSTEM**

#### **PROPERTIES OF NUMBERS AND NUMBER SEQUENCES**

Recognise and extend number sequences formed by counting from any number in steps of constant size: for example, count on in steps of 25 to 500, and then back to zero.

Extend counting back to a specified negative number.

Recognise multiples of 2 up to the tenth multiple.

Recognise multiples of 3 up to the tenth multiple.

Recognise multiples of 4 up to the tenth multiple.

Recognise multiples of 5 up to the tenth multiple.

Recognise multiples of 10, up to the tenth multiple.

Mentally multiply any integer up to 1000 by 10, and understand the effect ie the digits move one place to the left. It is useful to demonstrate this on a ThHTU board.

Mentally divide any integer up to 1000 by 10 (whole-number answers), and understand the effect ie the digits move one place to the right. It is useful to demonstrate this on a ThHTU board.

Respond to questions such as 'How many times larger is 260 than 26?', 'How many £ coins are there in £1500?', 'How much is a ten-pack of dog food if one tin is 42p?'

Begin to multiply by 100.

Recognise odd and even numbers up to 1000.

Know some of the properties of odd and even numbers eg the outcome of sums or differences of pairs of odd/even numbers.

#### **PLACE VALUE, ORDERING AND ROUNDING (WHOLE NUMBERS)**

**Read whole numbers to at least 10000** in figures.

**Read whole numbers to at least 10000** in words.

**Write whole numbers to at least 10000** in figures.

**Write whole numbers to at least 10000** in words.

**Know what each digit in a four-digit number represents, including zero as a place holder.**

Partition numbers into thousands, hundreds, tens and ones.

Use *units or ones, tens, thousands, ten thousand, hundred thousand, million, digit, one-digit number, two-digit number, three-digit number, four-digit number etc, numeral, place value.*

Be able to read the above words.

Be able to write the above words.

Know what is 1 more than a specified number, including those with units such as p, ml, g, m.

Know what is 1 less than a specified number, including those with units such as p, ml, g, m.

Know what is 10 more than a specified number, including those with units such as p, ml, g, m.

Know what is 10 less than a specified number, including those with units such as p, ml, g, m.

Know what is 100 more than a specified number, including those with units such as p, ml, g, m.

Know what is 100 less than a specified number, including those with units such as p, ml, g, m.

Know what is 1000 more than a specified number, including those with units such as p, ml, g, m.

Know what is 1000 less than a specified number, including those with units such as p, ml, g, m.

Count on in tens, from any whole number up to 10000.

Count back in tens from any whole number up to 10000.

Count on hundreds from any whole number up to 10000.

Count back in hundreds or from any whole number up to 10000.

Count on thousands from any whole number up to 10000.

Count back in thousands from any whole number up to 10000.

Know how many tens you count on to 23 to get just past 100.

Know how many hundreds you count on to 374 to get more than 1000.

Multiply whole numbers by 10, understanding that the digits move one place to the left.

Divide whole numbers by 10, understanding that the digits move one place to the right.

Use the vocabulary of comparing and ordering numbers eg *how many, as many as, the same number as, equal to, more than, fewer than, greater than, less than, smaller than, larger than, more, least, largest, smallest, order, first, last, before, after, next, between, half way between, ordinal numbers as words and in the form 'nth'.*

Read the above vocabulary.

Write in words the above vocabulary.

**Use equals (=) correctly.**

**Use less than (<) correctly.**

**Use greater than (>) correctly.**

Give one or more numbers lying between two given numbers

Order a set of whole numbers less than 10000.

## **ESTIMATION AND ROUNDING**

Use *guess, estimate, approximate, round, nearest, roughly, nearly, approximately, too many, too few, enough, not enough.*

Read the above vocabulary.

Write the above vocabulary.

Make and justify estimates up to about 250.

Estimate a proportion of numbers and collections of objects.

Estimate the position of a number on a line whose ends only are numbered, and explain how the decision was made.

Estimate and use simple proportions eg if there is half a jar of sweets which originally contained 200, how many are there?

Compare contents of containers eg half as much in that one as this, or one and a half times as much in that one.

**Round any positive integer less than 1000 to the nearest 10.**

**Round any positive integer less than 1000 to the nearest 100.**

Round measurements in seconds, minutes, hours, metres, kilometres, miles, kilograms, litres, to the nearest 10 or 100 units.

Calculations by approximations.

Use in context *integer, positive, negative, minus, above/below zero.*

Read the above vocabulary.

Write the above vocabulary.

Recognise negative numbers in context (e.g. on a number line, on a ladder, on a temperature scale).

Order positive and negative numbers.

Use *next, consecutive, sequence, predict, continue, rule, relationship, sort, classify, property.*

Read the above vocabulary.

Write the above vocabulary.

Describe, extend and explain number sequences and patterns.

Make general statements about odd and even numbers and/or give examples that match them.

Use *multiple, digit*.

Read the above vocabulary.

Write the above vocabulary.

Recognise multiples in the 2 times tables.

Recognise multiples in the 3 times tables.

Recognise multiples in the 4 times tables.

Recognise multiples in the 5 times tables.

Recognise multiples in the 10 times tables.

Solve problems which involve multiples.

Investigate the patterns produced by multiples on different-sized grids.

## **FRACTIONS**

Use *fraction, half, quarter, eighth, sixth, third etc.*

Read the above vocabulary.

Write the above vocabulary.

Use fraction notation.

**Recognise simple fractions that are several parts of a whole**, such as  $\frac{2}{3}$  or  $\frac{5}{8}$

**Recognise mixed numbers.**

**Recognise the equivalence of simple fractions** (e.g. fractions equivalent to  $\frac{1}{2}$ ).

Identify two simple fractions with a total of 1 (e.g.  $\frac{3}{10}$  and  $\frac{7}{10}$ ).

Recognise one whole is equivalent to two halves, three thirds, n nths.

Order simple fractions: for example, decide whether fractions such as  $\frac{3}{8}$  or  $\frac{7}{10}$  are greater or less than one half.

Begin to relate fractions to division and find simple fractions of form  $\frac{1}{n}$  of shapes, numbers or quantities.

Find fractions of form  $\frac{m}{n}$  of shapes.

## **PROPORTION**

Use *in every, for every*.

Read the above vocabulary.

Write the above vocabulary.

Begin to use ideas of simple proportion: for example, 'one for every...' and 'one in every...'

## **DECIMALS**

Understand decimal notation and place value for tenths.

Understand decimal notation and place value for hundredths.

Place decimal numbers on a line where only the whole numbers are labelled and the decimal places indicated by marker lines.

Use decimal notation to order amounts of money.

Use decimal notation to convert a sum of money such as £13.25 to pence.

Work out calculations with mixed units eg £ and p, m and cm.

Use decimal notation to convert lengths such as 125 cm to metres.

Use decimal notation to round a sum of money to the nearest pound.

In one step (operation) change one number to another separated by more than 0.1 eg 4.7 to 4.9; 6.9 to 6.1.

Recognise the equivalence between the decimal and fraction forms of one half and one quarter.

Recognise the equivalence between the decimal and fraction forms of tenths such as 0.3.

## **CALCULATIONS**

### **UNDERSTANDING ADDITION AND SUBTRACTION**

*Use take away, subtract, how many are left, how much less, difference between, how much more, how many more to make, decrease, inverse and the minus sign.*

Read the above vocabulary.

Write the above vocabulary.

Consolidate understanding of relationship between + and –.

Understand the principle (not the names) commutative and associative laws as they apply to addition and subtraction.

Understand that the sum of two positive numbers is greater than either number.

Understand that addition and subtraction are the inverses of each other, and use this to check results.

Consolidate subtraction as taking away.

Consolidate subtraction as finding the difference between.

Consolidate subtraction as complementary addition.

Understand that subtraction is non-commutative.

Understand that subtracting zero leaves a number unchanged.

Understand that subtraction is the inverse of addition, and use this to check results.

## **RAPID RECALL OF ADDITION AND SUBTRACTION FACTS**

Consolidate knowing by heart addition facts for all numbers to 20.

Consolidate knowing by heart subtraction facts for all numbers to 20.

Derive quickly all number pairs that total 100 (e.g.  $62 + 38$ ,  $75 + 25$ ,  $40 + 60$ ).

Derive quickly addition doubles from  $1+1$  to  $50+50$ .

Derive quickly all addition doubles which are multiples of 10 eg  $290+290$ /

Derive quickly all addition doubles which are multiples of 100 eg  $1900+1900$ .

Derive quickly all pairs of multiples of 50 with a total of 1000 (e.g.  $850 + 150$ ).

## **MENTAL CALCULATION STRATEGIES (+ AND -)**

Find a small difference by counting up (e.g.  $5003 - 4996$ ).

Count on or back in repeated steps of 1, 10, 100 or 1000.

Partition into tens and units, adding the tens first.

Partition into hundreds, tens and units, adding the hundreds first

Identify near doubles, using known doubles (e.g.  $150 + 160$ ).

Add or subtract the nearest multiple of 10, 100 or 1000, then adjust.

Continue to use the relationship between addition and subtraction eg if you know  $36+19=55$ , you know  $19+36$ ,  $55-19$ ,  $55-36$ .

Add 3 or 4 small numbers, finding pairs totalling 10, or 9 or 11.

Recognise that a set of numbers like  $5+5+6+4$  is equivalent to  $5 \times 4$ .

Add three two-digit multiples of 10, such as  $40 + 70 + 50$ .

**Use known number facts and place value to add mentally, including any pair of two-digit whole numbers.**

**Use known number facts and place value to subtract mentally, including any pair of two-digit whole numbers.**

Continue to add two-digit multiples of 10.

Continue to subtract two-digit multiples of 10.

Add a pair of multiples of 100, crossing the 1000 boundary.

Subtract a pair of multiples of 100, crossing the 1000 boundary.

Revise adding a multiple of 10 to a two- or three- digit number, without crossing the hundreds boundary.

Revise subtracting a multiple of 10 from a two- or three- digit number, without crossing the hundreds boundary

Revise adding a two-or three- digit number to a multiple of 10.

Revise adding a two-or three- digit number to a multiple of 100.

Revise adding a two-or three- digit number to a multiple of 1000.

Find what to add to a two- or three- digit number to make 100 or the next higher multiple of 100.

Find what to add to a four-digit multiple of 100 to make the next higher multiple of 1000.

Add a single digit to any three- or four-digit number, crossing the tens boundary.

Subtract a single digit from a multiple of 100 or 1000.

Subtract a single digit from a three- or four-digit number, crossing the tens boundary.

Find a small difference between a pair of numbers lying each side of a multiple of 1000.

Add any pair of two-digit numbers, including crossing the tens boundary.

Subtract any pair of two-digit numbers, including crossing the tens boundary.

## **PENCIL AND PAPER PROCEDURES (+ AND -)**

Using informal pencil and paper methods, and adding the most significant digit first, add HTU + TU, then HTU + HTU, crossing the tens boundary.

Using informal pencil and paper methods, and adding the most significant digit first, add HTU + TU, then HTU + HTU, crossing the hundred boundary.

Using informal pencil and paper methods, and adding the most significant digit first, add HTU + TU, then HTU + HTU, crossing the tens and hundred boundary.

Using informal pencil and paper methods, and using compensation (add too much, take some off), add HTU + TU, then HTU + HTU, crossing the tens or the hundred boundaries.

**Use standard written method**, adding the units first and carrying where necessary.

Using methods similar to the above, extend **addition to money as decimals**, adding two or more three-digit sums of money, without adjustment to the pounds, and lining up decimal points.

Using methods similar to the above, extend **addition to money as decimals**, adding two or more

three-digit sums of money, with adjustment to the pounds, and lining up decimal points.

Using informal pencil and paper methods subtract HTU - TU, then HTU - HTU, using counting up (complementary addition), crossing the tens boundary.

Using informal pencil and paper methods subtract HTU - TU, then HTU - HTU, using counting up (complementary addition), crossing the hundred boundary.

Using informal pencil and paper methods subtract HTU - TU, then HTU - HTU, using counting up (complementary addition), crossing the tens or the hundred boundaries.

Using informal pencil and paper methods, and using compensation (take off too much, add some on), subtract HTU - TU, then HTU - HTU, crossing the tens boundary.

Using informal pencil and paper methods, and using compensation (take off too much, add some on), subtract HTU - TU, then HTU - HTU, crossing the hundred boundary.

Using informal pencil and paper methods, and using compensation (take off too much, add some on), subtract HTU - TU, then HTU - HTU, crossing the tens or the hundred boundaries.

**Use standard written method**, subtract TU – TU no decomposition required.

**Use standard written method**, subtract TU – TU using decomposition.

**Use standard written method**, subtract HTU – TU no decomposition required.

**Use standard written method**, subtract HTU – TU using decomposition for T → U.

**Use standard written method**, subtract HTU – TU using decomposition for H → T.

**Use standard written method**, subtract HTU – TU using decomposition for H → T and T → U.

**Use standard written method**, subtract HTU – HTU no decomposition required.

**Use standard written method**, subtract HTU – HTU using decomposition for T → U.

**Use standard written method**, subtract HTU – HTU using decomposition for H → T.

**Use standard written method**, subtract HTU – HTU using decomposition for H → T and T → U.

Using methods similar to the above, extend **subtraction to money as decimals**, adding two or more three-digit sums of money, with or without adjustment from the pence to the pounds, and lining up decimal points.

## **UNDERSTANDING MULTIPLICATION AND DIVISION**

*Use times, multiply, multiplied by, product, multiple, inverse and the x sign; share, group, divide, divided by, divided into, divisible by, factor, quotient, remainder, inverse and the x and / signs; share, group, divide, divided by, divided into, divisible by, factor, quotient, remainder, inverse and the dividing signs ÷ and /.*

Read the above vocabulary.

Write the above vocabulary.

Extend understanding of the operations of  $\times$  and  $\div$ , and their relationship to each other and to  $+$  and  $-$ .

Understand the principles (not the names) of the commutative, associative and distributive laws as they apply to multiplication.

Commutative-  $8 \times 15 = 15 \times 8$ .

Associative-  $6 \times 15 = 6 \times (5 \times 3) = (6 \times 5) \times 3 = 30 \times 3 = 90$

Distributive-  $18 \times 5 = (10 + 8) \times 5 = (10 \times 5) + (8 \times 5) = 50 + 40 = 90$

Understand that multiplication and division are the inverse of each other, and use this to check results.

Understand division either as grouping or as repeated subtraction.

Begin to relate division and fractions.

Find remainders after division.

Divide a whole number of pounds by 2, 4, 5 or 10 to give £.p.

Round up or down after division, depending on the context.

## **RAPID RECALL OF MULTIPLICATION AND DIVISION FACTS**

Use, read and write *double*, *twice*, *half*, *halves*, *whole*, *divide by 2*, *divide into 2*, and  $\frac{1}{2}$  as a *half*.

**Know by heart: multiplication facts for 2 times-table.**

**Know by heart: multiplication facts for 3 times-table.**

**Know by heart: multiplication facts for 4 times-table.**

**Know by heart: multiplication facts for 5 times-table.**

**Know by heart: multiplication facts for 10 times-table.**

Begin to know: multiplication facts for 6 times-table.

Begin to know: multiplication facts for 7 times-table.

Begin to know: multiplication facts for 8 times-table.

Begin to know: multiplication facts for 9 times-table.

Derive quickly: **division facts corresponding to 2 times-table.**

Derive quickly: **division facts corresponding to 3 times-table.**

Derive quickly: **division facts corresponding to 4 times-table.**

Derive quickly: **division facts corresponding to 5 times-table.**

Derive quickly: **division facts corresponding to 10 times-table.**

Derive quickly doubles of all whole numbers to 50 (e.g.  $38 + 38$ , or  $38 \times 2$ ).

Derive quickly doubles of multiples of 10 to 500 (e.g.  $460 \times 2$ ).

Derive quickly doubles of multiples of 100 to 5000 (e.g.  $3400 \times 2$ ).

Derive halves quickly (e.g.  $74 \div 2$ , half of 420, half of 3800).

## **MENTAL CALCULATION STRATEGIES (x and ÷)**

Use doubling or halving, starting from known facts eg double/halve two-digit numbers by doubling/halving the tens first; to multiply by 4, double, then double again; to multiply by 5, multiply by 10 then halve; to multiply by 20, multiply by 10 then double; find the 8 times-table facts by doubling the 4 times-table; find quarters by halving halves.

Use closely related facts (e.g. to multiply by 9 or 11, multiply by 10 and adjust; develop the  $\times 6$  table from the  $\times 4$  and  $\times 2$  tables).

Partition and use the distributive law (e.g.  $23 \times 4 = (20 \times 4) + (3 \times 4)$ ).

Use the relationship between multiplication and division eg knowing  $12 \times 9$  means you know  $9 \times 12$ ,  $9 = 108 \div 12$ ,  $25 \times 4 = 25 + 25 + 25 + 25$ .

Use known number facts and place value to multiply two-, three- or four digit integers, by 10.

Use known number facts and place value to divide two-, three- or four digit integers, by 10 (whole-number answers)

Use known number facts and place value to multiply two-, three- or four digit integers, by 100.

Use known number facts and place value to divide two-, three- or four digit integers, by 100 (whole-number answers)

Double any multiple of 5 up to 100.

Halve any multiple of 10 to 200.

Consolidate multiplying a two-digit multiple of 10 by 2,3,4,5 or 10.

Begin to multiply by 6,7,8 or 9.

Multiply a two-digit number by 2,3,4 or 5, crossing the tens boundary.

## **PENCIL AND PAPER PROCEDURES (x and ÷)**

Use informal pencil and paper methods to support, record or explain short multiplications eg the grid method and partitioning.

Use informal pencil and paper methods to support, record or explain short divisions eg the grid method and partitioning.

Approximate first so children can check if actual answer makes sense.

Standard short multiplication form.

Standard short division form.

Approximate first so children can check if actual answer makes sense.

## **CHECKING THE RESULTS OF CALCULATIONS**

Check with the inverse operation.

Check the sum of several numbers by adding in reverse order.

Check with an equivalent calculation ie by using a different calculation pathway.

Estimate and check by approximating (round to nearest 10 or 100).

Use knowledge of sums or differences of odd/even numbers eg adding odd+odd=even,  $e+e=e$ ,  $o+e=o$ ,  $e-e=e$ ,  $o-o=e$ ,  $o-e=o$ ,  $e-o=o$ .

## **SOLVING PROBLEMS**

### **MAKING DECISIONS**

Use *operation, sign, symbol, number sentence, equation*.

Read the above vocabulary.

Write the above vocabulary.

**Choose and use appropriate number operations and appropriate ways of calculating (mental, mental with jottings, pencil and paper) to solve problems.**

### **REASONING ABOUT NUMBERS OR SHAPES**

Explain methods and reasoning about numbers orally and in writing.

Begin to use conventional notation and vocabulary to record the explanation. This should be extended to calculations which cannot be done wholly mentally.

Solve mathematical problems or puzzles, recognise and explain patterns and relationships, generalise and predict.

Suggest extensions by asking 'What if...?'

Make and investigate a general statement about familiar numbers or shapes by finding examples that satisfy it.

### **PROBLEMS INVOLVING 'REAL LIFE', MONEY OR MEASURES.**

Use all four operations to solve word problems involving numbers in 'real life', money and measures, using one or more steps, including converting pounds to pence and v.v.

### **MONEY**

Use *money, coin, pound, £, pence, note, price, cost, cheaper, more expensive, pay, change, total, value, amount*.

Read the above vocabulary.

Write the above vocabulary.

Change pounds to pence and vice versa.

Find simple fractions of whole numbers of pounds.

## **MEASURES, SHAPE AND SPACE**

### **MEASURES**

*Use unit, standard unit, metric unit, imperial unit, standard metric units (km, m, cm, mm, kg, g, l, ml), including their abbreviations, and imperial units (mile, pint).; length and distance words like long, short, tall, high, low, wide, narrow, shallow, deep, thick, thin etc; far, near, distance, circumference, perimeter; mass words like big, bigger, small, smaller, balances; weight words like heavy, light, weighs; capacity words like full, empty, holds; comparative words like longer, longest.*

Read the above vocabulary.

Write the above vocabulary.

**Know and use**-the equivalent of one half, one quarter, three quarters and one tenth of 1 km, 1 m, 1 kg, 1 litre in m, cm, g, ml.

Convert up to 1000 centimetres to metres, and vice versa.

Begin to use decimal forms eg 1.6m in cm.

Suggest suitable units and measuring equipment to estimate or measure length, mass or capacity.

Record estimates and readings from scales to a suitable degree of accuracy.

Measure the perimeter of rectangles and other simple shapes, using counting methods and standard units (cm,)

Calculate the perimeter of rectangles and other simple shapes, using counting methods and standard units (cm)

Measure the area of rectangles and other simple shapes, using counting methods and standard units (cm squared)

Calculate the area of rectangles and other simple shapes, using counting methods and standard units (cm squared)

Solve 'story problems' using km, m, cm, kg, g, ml or l.

### **TIME**

*Use names of the days of the week, months and seasons; day, week, fortnight, month, season, year, leap year, century, millenium, morning, afternoon, evening, night, midnight,*

*noon, hour, minute, second, today, tomorrow, weekend, a.m., p.m., how long ago, how long will it be to, arrive, depart, faster, fastest, slowest, takes longer, takes less time, earliest, latest.*

Read the above vocabulary.

Write the above vocabulary.

Know and use the rhyme '30 days hath September...and/or teach 'knuckles'.

Suggest suitable Year 3 units to estimate or measure time and use them in practical contexts.

Read simple timetables.

Use this year's calendar.

Know- 1 millenium = 1000 years,	1 year = 52 weeks	1 day = 24 hours
1 century = 100 years	1 year = 12 months	1 hour = 60 minutes
1 year = 365 days	1 week = 7 days	1 minute = 60 secs

Use all four operations to solve word problems involving time.

Estimate/check times using seconds, minutes, hours.

Read the time from an analogue clock to the nearest minute.

Read the time to the nearest minute from a 12-hour digital clock.

Use am and pm.

Use the notation 9:53.

## **SHAPE AND SPACE**

*Use pattern, shape, 2-D, two-dimensional, 3-D, three-dimensional, line, edge, side, face, surface, base, point, angle, vertex, vertices, centre, radius, diameter, net, make, build, construct, draw, sketch, curved, straight, regular, irregular, concave, convex, closed, open, circular, triangular, hexagonal, cylindrical, spherical, square-based, right-angled.*

Read the above vocabulary.

Begin to write the above vocabulary.

Name, describe, classify and visualise 3-D and 2-D shapes including circle, semi-circle, triangle, equilateral triangle, isosceles triangle, quadrilateral, rectangle, oblong, pentagon, hexagon, heptagon, octagon, polygon, cube, cuboid, pyramid, sphere, hemisphere, cylinder, cone, prism, tetrahedron, polyhedron.

**Classify polygons using criteria such as number of right angles, whether or not they are regular, symmetry properties.**

Make shapes: for example, construct polygons by paper folding or using pinboard, and discuss properties such as lines of symmetry.

Visualise 3-D shapes from 2-D drawings and identify simple nets of solid shapes.

## **SYMMETRY**

Use *mirror line, line of symmetry, line symmetry, symmetrical, reflect, reflection, translation.*

Read the above vocabulary.

Write the above vocabulary.

Sketch the reflection of a simple shape in a mirror line parallel to one side (all sides parallel or perpendicular to the mirror line).

Know that equivalent points of an object and its reflection are the same (shortest) distance from the line of symmetry.

## **POSITION AND MOVEMENT**

Use prepositions and everyday words to describe position and movement, *position, direction, ascend, descend, journey, route, map, plan, grid, row, column, origin, co-ordinates, compass point, north, south, east, west, north-east, north-west, south-east, south-west, horizontal, vertical, diagonal.*

Read the above vocabulary.

Write the above vocabulary.

Recognise simple examples of horizontal and vertical lines.

Recognise positions and directions: for example, describe and find the position of a point on a grid of squares where the lines are numbered, using terms of the form 4 along, 2 up.

Begin to understand the convention (4,2)

Use the eight compass directions N, S, E, W, NE, NW, SE, SW.

Make and measure clockwise and anti-clockwise turns: for example, from SW to N, or from 4 to 10 on a clock face.

Use *turn, rotate, whole turn, half turn, quarter turn, angle, right angle, straight line, degree, ruler, set square, angle measurer.*

Read the above vocabulary.

Write the above vocabulary.

Begin to know that angles are measured in degrees and that one whole turn is  $360^\circ$  or 4 right Angles, a quarter turn is  $90^\circ$  or one right angle and half a right angle is  $45^\circ$ .

Relate the angles between points of the compass to degrees.

Start to order a set of angles less than  $180^\circ$ .

## PROBABILITY

Use the language associated with probability to discuss events, including those with equally likely outcomes- *likely, unlikely, certain, impossible, possible, probable*.

## ORGANISING AND USING DATA

Use *vote, survey, questionnaire, data, count, tally, sort, set, represent, table, list, graph, chart, diagram, axes, label, title, most least common or popular*.

Read the above vocabulary.

Write the above vocabulary.

Solve a problem by collecting quickly, organising, representing and interpreting data in tables, charts, graphs and diagrams.

Interpret computer-generated data displays eg tally charts and frequency tables.

Interpret pictograms – symbol representing 2, 5, 10 or 20 units.

Interpret bar charts – intervals labelled in 2s, 5s, 10s or 20s.

Interpret Venn diagrams (two criteria).

Interpret Venn Carroll diagrams (two criteria).

Interpret binary trees.

Construct pictograms – symbol representing 2, 5, 10 or 20 units.

Construct bar charts – intervals labelled in 2s, 5s, 10s or 20s.

Construct Venn diagrams (two criteria).

Construct Carroll diagrams (two criteria).

Construct binary trees.