

FORMAT FOR ILPs, REPORTS AND ANNUAL REVIEWS

YEAR 2 LEVEL

NUMBERS AND THE NUMBER SYSTEM

COUNTING, PROPERTIES OF NUMBERS & NUMBER SEQUENCES

Say the number names in order from zero to at least 30.

Say the number names in order from 30 back to zero.

Say the number names in order from zero to at least 50.

Say the number names in order from 50 back to zero.

Say the number names in order from zero to at least 100.

Say the number names in order to from at least 100.back to zero.

Fill in gaps on a number track less than 30 with some numbers already entered.

Fill in gaps on a number track less than 50 with some numbers already entered.

Fill in gaps on a number track less than 100 with some numbers already entered.

Place numbers a specified interval in front of a given number on a number track.

Place numbers a specified interval behind a given number on a number track.

Counting forwards on a number track, give the interval between two specified numbers.

Counting backwards on a number track, give the interval between two specified numbers.

Count reliably up to 100 objects by grouping them in tens.

Count reliably up to 100 objects by grouping them in twos.

Count reliably up to 100 objects by grouping them in fives.

Use, understand and begin to read 'count', 'tally' and 'how many?'

Understand that if you tally in different groupings, the answer will still be the same.

Suggest appropriate tally groupings for different counting scenarios eg children in a class, sugar lumps in a box, eggs in a carton.

Describe and extend simple number sequences: count on in ones, starting from any two digit number.

Describe and extend simple number sequences: back in ones, starting from any two digit number.

Describe and extend simple number sequences: count on in tens, starting from any two digit number.

Describe and extend simple number sequences: count back in tens, starting from any two digit number.

From zero and then from any small number, count on in 2s to at least 30.

From zero and then from any small number, count on in 3s to at least 30.

From zero and then from any small number, count on in 4s to at least 30.

From zero and then from any small number, count on in 5s to at least 30.

Count back in 2s from any number up to at least 30.

Count back in 3s from any number up to at least 30.

Count back in 4s from any number up to at least 30.

Count back in 5s from any number up to at least 30.

Investigate the patterns when child counts on in 2s on a 4x4 grid and colours the squares landed on. Repeat on a 5x5 and then predict 6x6.

Describe the rule, and extend, ascending sequences to 30 which are multiples of 2.

Describe the rule, and extend, descending sequences to 30 which are multiples of 2.

Describe the rule, and extend, ascending sequences to 30 which are multiples of 3.

Describe the rule, and extend, descending sequences to 30 which are multiples of 3

Create sequences with a given constraint eg includes the numbers 6 and 12.

Within the context of sequences, understand and use *odd*, *even*, *sequence*, *predict*, *continue* and *rule*.

Begin to read the above vocabulary.

Respond to questions such as 'Which tens number comes before/after 30?'

Know how many tens it takes to get from one number to another eg 20 to 70, 54 to 94.

Count in hundreds from and back to zero.

Respond to questions such as 'Which hundreds number comes before/after 400?'

Know how many hundreds it takes to get from one number to another eg 120 to 270, 354 to 594.

Begin to recognise two-digit multiples of 2 as numbers ending in 0, 2, 4, 6, 8.

Begin to recognise two-digit multiples of 5 as numbers ending in 0 or 5.

Begin to recognise two-digit multiples of 10 as numbers ending in 0.

Understand and use *multiple*.

Begin to read *multiple*.

Recognise odd and even numbers to at least 30.

Know which odd/even number comes before/ after a specified number to at least 30.

Know that an even number is divisible exactly by 2 and there is 1 left over when an odd number is divided.

PLACE VALUE AND ORDERING

Read whole numbers to at least 100 in figures.

Read whole numbers to at least 100 in words.

Write whole numbers to at least 100 in figures.

Write whole numbers to at least 100 in words.

Know what each digit in a two-digit number represents, including 0 as a place holder.

Partition two-digit numbers into a multiple of ten and ones (TU).

Show two-digit numbers on an abacus.

Understand and use *units or ones, tens, hundreds, digits, one-digit number, two-digit number, three-digit number, place value*.

Begin to read the above vocabulary.

In one step (operation) make 5 into 45 etc.

In one step (operation) change 49 into 9 etc.

Explain what number needs to go in each box- $64 = \square + 4$, $53 = 50 + \square$

Make the biggest and smallest numbers with two provided digits.

Exchange up to 100 pennies for 10p and 1p coins.

Understand and use the vocabulary of comparing and ordering numbers eg *ordinal numbers in words, how many, the same number as, equal to, more than, less than, fewer than, greater than, smaller than, larger than, most, least, smallest, largest, order, first, last, before, after, next, between, halfway between*.

Begin to read the above vocabulary.

Use the = sign to represent equality.

Compare two given two-digit numbers, say which is more or less, and give a number which lies between them.

Say the number that is 1 more or less than any given two-digit number.

Say the number that is 10 more or less than any given two-digit number

Order whole numbers to at least 100.

Position numbers to 100 on a number line.

Position numbers to 100 in a 100 square.

Position numbers to 100 in a number square fragment containing some numbers.

Use a number line with its ends labelled in multiples of $10 \leq 50$ to find the halfway number eg halfway between 30 and 50.

ESTIMATION AND ROUNDING

Use *guess how many, estimate, round, nearest, roughly, nearly, close to, about the same as, too many, too few, enough, not enough.*

Begin to read the above vocabulary.

Give a sensible estimate of at least 50 objects.

Record estimates on a number line and use it to find the difference between it and the actual number.

Estimate the position of an undivided number line whose ends are numbered and ≤ 10 .

Begin to round numbers less than 100 to the nearest 10 by saying which number it is nearer to (a number ending in 5 rounds up because it is halfway).

FRACTIONS

Understand, use and begin to read *part, fraction, one whole, one half, one quarter.*

Recognise and write $\frac{1}{2}$, $\frac{1}{4}$ as one half, one quarter.

Begin to recognise and find one half of shapes.

Recognise not-halves.

Begin to recognise and find one quarter of shapes.

Recognise not-quarters.

Begin to recognise and find one half of small numbers of objects.

Begin to recognise and find one half of objects such as a cake or a jar of water.

Begin to recognise and find one quarter of small numbers of objects.

Begin to recognise and find one quarter of objects such as a cake or a jar of water.

Begin to recognise that two halves or four quarters make one whole and that two quarters and one half are equivalent.

Recognise that two quarters and one half make one whole.

Begin to position halves on a number line eg $5\frac{1}{2}$ is between 5 and 6.

Say half of an even number ≤ 20 .

CALCULATIONS

UNDERSTANDING ADDITION AND SUBTRACTION

Use *more, add, sum, total, altogether, equals, sign*.

Begin to read the above vocabulary.

Begin to write the above vocabulary.

Use the +, – and = signs to record mental additions and subtractions in a number sentence.

Recognise the use of a symbol such as n or s to stand for an unknown number, and complete using rapid recall for facts to 10.

Recognise that addition can be done in any order, but not subtraction: for example, $3 + 21 = 21 + 3$, but $21 - 3$ does not equal $3 - 21$.

Understand that more than two numbers can be added.

Add two-digit numbers with the help of 10p and 1p coins or 10-sticks and unit bricks (totals up to 100).

Add two-digit numbers with the help of a number line (totals up to 100).

Add two-digit numbers with the help of 100 square (totals up to 100).

Add two-digit numbers (totals up to 100) using and explaining mental strategies.

Understand that subtraction is the inverse of addition (subtraction reverses addition).

Begin to add three single-digit numbers mentally (totals up to about 20).

Add three or more one- or two-digit numbers with the help of 10p and 1p coins or 10-sticks and unit bricks (totals up to 100).

Add three or more one- or two-digit numbers with the help of a number line (totals up to 100).

Add three or more one- or two-digit numbers with the help of 100 square (totals up to 100).

Add three or more one- or two-digit numbers (totals up to 100) using and explaining mental strategies.

Investigate 3 hops on a number line from a given start to a specified end ≤ 100 and record in the form $32 + \nabla + \square = 100$

Find the missing number in equations of the forms-

$$1 + \square + 5 = 35 \quad 1 + 29 + \square = 35 \quad \square + 29 + 5 = 35$$

Explore the different totals which can be made by adding different combinations of provided numbers eg three out of 14,15,16,19.

Using coins if necessary, add bills containing 3 or more two-digit numbers of pennies.

RAPID RECALL OF ADDITION AND SUBTRACTION FACTS

Know by heart all addition and subtraction facts for each number to at least 10.

Know all pairs of numbers with a total of 20 (e.g. $13 + 7$, $6 + 14$);

Know by heart all pairs of multiples of 10 with a total of 100 (e.g. $30 + 70$).

MENTAL CALCULATION STRATEGIES (+ AND -)

Use knowledge that addition can be done in any order to do mental calculations more efficiently eg the larger number first and count on in tens or ones, add three small numbers by putting the largest number first and/or find a pair totalling 10.

Partition into '5 and a bit' when adding 6, 7, 8 or 9, then recombine (e.g. $16 + 8 = 15 + 1 + 5 + 3 = 20 + 4 = 24$).

Partition additions into tens and units, then recombine.

Find a small difference by counting up from the smaller to the larger number e.g. $42 - 39$, and know that it is easier than counting back.

Identify near doubles, using doubles already known (e.g. $8 + 9$, $40 + 41$).

Add/subtract 9 or 11 by adding/subtracting 10 and adjusting by 1.

Begin to add/subtract 19 or 21 by adding/subtracting by 20 and adjust by 1.

Use patterns of similar calculations eg $7+0 = 7$, $6+1=7$ etc to derive $3+4=$.

State the subtraction corresponding to a given addition, and vice versa.

Use known number facts and place value to add/subtract mentally eg different number sentences linking 2,7,9.

Add or subtract a single digit to or from any two-digit number without crossing the tens boundary eg $32+5$.

Add a single digit to/from a multiple of ten.

Subtract a single digit from a multiple of ten.

Begin to add a two-digit number to a multiple of ten without crossing the tens boundary or 100.

Add a teens number to a two-digit number without crossing the tens boundary or 100.

Subtract a teens number from a two-digit number without crossing the tens boundary or 100.

Add 10 to any two-digit number, without crossing 100.

Subtract 10 from any two-digit number, without crossing 100.

Add a pair of multiples of 10 without crossing 100.

Subtract a pair of multiples of 10 without crossing 100.

Find what must be added to a two-digit multiple of 10 to make 100.

Add a multiple of 10 to a two-digit number without crossing 100.

Subtract a multiple of 10 from a two-digit number without crossing 100.

Add a pair of multiples of 100 without crossing 1000.

Subtract a pair of multiples of 100 without crossing 1000.

Bridge through 10 or 20, then adjust.

Add a pair of single-digit numbers, crossing 10.

Subtract a single digit from a 'teens' number, crossing 10.

Add a single digit to a 'teens' number, crossing 20.

Subtract a single digit from a 'twenties' number, crossing 20.

Find a small difference between a pair of numbers lying each side of 20, or another multiple of 10.

UNDERSTANDING MULTIPLICATION AND DIVISION

Use *double, times, multiply, multiplied by, multiple of, lots of, groups of, times as (big, long, wide...)* and *read and write the x sign; one each, two each etc, share, halve, divide, left over, divided by, equal groups of, and read and write the division sign \div .*

Begin to read the above vocabulary.

Understand the operation of multiplication as repeated addition or as describing an array.

Begin to understand that multiplication can be done in any order.

Begin to understand division as grouping (repeated subtraction) or sharing.

Use counters for sharing, then a number line for repeated subtraction and then mental strategies for dividing one- and two-digit numbers by one digit or 10.

Use the \times , \div and $=$ signs to record mental calculations in a number sentence.

Recognise the use of a symbol such as \pounds or \pounds to stand for an unknown number in number sentences involving \times or \div .

Know and use halving as the inverse of doubling.

RAPID RECALL OF MULTIPLICATION AND DIVISION FACTS

Understand and use *double, twice, half, halve, whole, divide by two, divide into two etc.*

Begin to read the above vocabulary.

Know by heart multiplication facts for the 2 times-table.

Know by heart multiplication facts for the 10 times-table.

Know doubles of numbers to 10 and the corresponding halves.

Begin to know multiplication facts for the 5 times-table.

Derive quickly division facts corresponding to the 2 and 10 times-tables; doubles of all numbers to at least 15 (e.g. $11 + 11$ or 11×2); doubles of multiples of 5 to 50 (e.g. 20×2 or 35×2); halves of multiples of 10 to 100 (e.g. half of 70).

MENTAL CALCULATION STRATEGIES (x and ÷)

Use known number facts and place value to mentally carry out simple multiplications and divisions.

Multiply a single digit by 1 or 10.

Divide a two-digit multiple of 10 by 1 or 10.

Begin to double any multiple of 5 up to 50.

Begin to halve any multiple of 10 to 100.

Multiply a single digit up to 5 by 2,3,4,5.

CHECKING THE RESULTS OF CALCULATIONS

Repeat addition in a different order.

Check with an equivalent calculation.

SOLVING PROBLEMS

MAKING DECISIONS

Understand and use *operation, sign, symbol, number sentence*.

Begin to read the above vocabulary.

Choose and use appropriate operations and efficient calculation strategies (e.g. mental, mental with jottings) **to solve problems.**

Decide what equipment will be needed eg cubes, squared paper, 100 square, coins etc.

Explain how the problem was solved.

REASONING ABOUT NUMBERS OR SHAPES

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

Suggest extensions by asking 'What if...?' or 'What could I try next?'

Investigate a general statement about familiar numbers or shapes by finding examples that satisfy it.

Explain how a problem was solved orally and, where appropriate, in writing.

PROBLEMS INVOLVING 'REAL LIFE', MONEY OR MEASURES

Use mental addition, subtraction, simple multiplication and division to solve simple word problems involving numbers in 'real life', money or measures, using one or two steps. Explain how the problem was solved.

MONEY

Understand *coin, pound, £, pence, price, cost, pay, costs more/less, change, total, how much?*

Begin to read the above vocabulary.

Recognise all coins.

Exchange coins for their equivalent value of two or three smaller coins.

Total coins to a pound or less.

Begin to use £.p notation for money eg know that £4.65 indicates £4 and 65p.

Find totals, give change, and work out which coins to pay.

MEASURES, SHAPE AND SPACE

MEASURES

Use *long, short, tall, high, low, wide, narrow, deep, shallow, thick, thin, far, near, close, weight, weighs, heavy, light, balances, full, empty, holds, roughly, nearly, about, close to.*

Begin to read the above vocabulary.

Know that- 1 metre = 100 centimeters 1 kilogram = 1000 grams 1 litre = 1000 millilitres

Estimate, measure and compare lengths in m.

Estimate, measure and compare lengths in cm.

Estimate, measure and compare masses using kg.

Estimate, measure and compare capacities, using litres.

For a variety of practical situations, correctly select m, cm, kg or l.

For m, cm, l or kg, read a simple scale to the nearest labeled divisions.

Record estimates and measurements as '3 and a bit metres long' or 'about 8 centimetres' or 'nearly 3 kilograms heavy'.

Use a ruler to draw and measure lines to the nearest centimetre

Solve simple problems incorporating Year 2 units, using one or two steps, explaining reasoning and, where appropriate, writing a number sentence using one or two steps

TIME

Use names of the days of the week, names of the months, seasons of the year, second, minute, hour, day, week, fortnight, month, year, season, morning, afternoon, evening, night, midnight, weekend, today, yesterday, tomorrow, now, soon, early, late, before, after, first, second, next, quick, fast, slow, how long ago?, how long will it be to...?, how long will it take to...?, how often...?, always, never, often, sometimes, usually, once, twice, and comparatives such as faster, slower, takes longer etc.

Begin to read the above vocabulary.

Suggest suitable Year 2 units to estimate or measure time and use them in practical contexts.

Order the months of the year.

Order the seasons.

Know	1 week = 7 days	1 day = 24 hours
	1 hour = 60 minutes,	1 minute = 60 seconds.
	1 minute = 60 seconds.	

Use mental strategies to solve simple problems incorporating these units.

Read the time to the hour, on a digital clock.

Read the time to half hour on a digital clock.

Read the time to a quarter past on a digital clock.

Read the time to a quarter to on a digital clock

Read the time to the hour on a 12-hour analogue clock.

Read the time to half hour on a 12-hour analogue clock.

Read the time to a quarter past on a 12-hour analogue clock.

Read the time to a quarter to on a 12-hour analogue clock.

SHAPE AND SPACE

Understand and use *shape, pattern, flat, solid, hollow, side, edge, face, straight, curved, round, point, pointed, corner, sort, draw, make, build, circular, triangular, rectangular, surface.*

Begin to read the above vocabulary.

Use **the mathematical names for common 3-D and 2-D shapes**, including the pyramid, cylinder, pentagon, hexagon, octagon.

Sort shapes and describe some of their features, such as the number of sides and corners, symmetry (2-D shapes), or the shapes of faces and number of faces, edges and corners (3-D shapes).

Make and describe shapes, models, pictures and patterns using, for example, solid shapes, templates, pinboard and elastic bands, squared paper, straws, cubes, a programmable robot.

Relate solid shapes to pictures of them.

SYMMETRY

Understand, use and begin to read *fold, match, mirror line, reflection, symmetrical*.

Use reflecting objects and surfaces to make and describe reflections.

Create symmetrical patterns eg ink devils, pegboard, cubes etc

Begin to recognise line symmetry in pictures and patterns, testing with a mirror.

POSITION AND MOVEMENT

Understand and use mathematical vocabulary to describe position, direction and movement- *position, over, under, underneath, above, below, on, in, outside, inside in front, behind, beside, before, after, next to, opposite, between, close, far apart, middle, edge, corner, centre, top, bottom, side, direction, left, right, up, down, forwards, backwards, sideways, across, along, around, through, to, from, towards, away from, journey, higher, lower, clockwise, anti-clockwise, route.*

Begin to read the above vocabulary.

Describe, place, tick, draw or visualise objects in given positions using the Year 2 language. eg using squared paper, describe the movement of a counter in terms of how many squares along/up. eg using squared paper, describe the movement of a counter in terms of how many squares up/down/left/right.

Understand and use *slide, roll, turn, whole turn, half turn, quarter turn, right angle, straight line*.

Begin to read the above vocabulary.

Recognise whole, half and quarter turns, to the left or right.

Recognise whole, half and quarter turns, clockwise or anti-clockwise.

Know that a right angle is a measure of a quarter turn.

Recognise right angles in squares and rectangles.

Give instructions for moving along a route in straight lines and round right-angled corners: for example, to pass through a simple maze.

Describe repeating patterns in terms of the shape sliding along and turning through.

ORGANISING AND USING DATA

Understand and use *sort, set, represent, graph, table, list, count, label, most, /least common/ popular*.

Begin to read the above vocabulary.

Solve a given problem by sorting, classifying and organising information in a list eg odd numbers from 15 to 35, discussing the results.

Solve a given problem by sorting, classifying and organising information in a simple table eg names with 3,4,5,6...letters, discussing the results.

Solve a given problem by sorting, classifying and organising information in a 4-branch decision tree, discussing the results.

Solve a given problem by sorting, classifying and organising information in a pictogram where a symbol represents one unit eg faces for children going to bed at different times, discussing the results.

Solve a given problem by sorting, classifying and organising information in a block graph where a block represents one, discussing the results.

Discuss and explain results.