

LEVEL 5

Learning Area Outcome: I understand the structure of the number system and the relationship between numbers

Subject Focus: Number – The number system

	Year 3	Year 4
5.1.1	I can read, write and order whole numbers to ten thousand (10,000) in figures and words.	
	I can read, write and order whole numbers up to one hundred (100) in figures and words.	I can read, write and order whole number up to ten thousand (10,000) in figures and words.
5.1.2	I can recognise, read and position whole numbers on a number line.	
	I can recognise, read and position whole numbers up to one hundred (100) on a number line.	I can recognise, read and position whole numbers up to ten thousand (10,000) on a number line.
5.1.3	I can recognise the place value of any digit in a whole number ten thousand (10,000).	
	I can recognise the place value of any digit in a whole number up to one hundred (100).	I can recognise the place value of any digit in a whole number up to ten thousand (10,000).
5.1.4	I can compare and order whole numbers up to ten thousand and include symbols such as <, > or =.	
	I can compare and order whole numbers up to one hundred (100) and include symbols such as <, > or =.	I can compare and order whole numbers up to ten thousand (10,000) and include symbols such as <, > or =.

5.1.5	I can recognise, read, say and write (in figures) ordinal numbers from 1st to 31st.
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	Year 3	Year 4
5.1.6	I can identify odd and even numbers up to ten thousand (10,000).	
	I can identify odd and even numbers up to one hundred (100).	I can identify odd and even numbers up to ten thousand (10,000).
5.1.7	I can count forward and backwards in 1s, 2s, 10s and 100s starting from any whole number less than or equal to one thousand (1,000).	
	I can count forward and backwards in 1s, 2s, 10s starting from any whole number up to one hundred (100).	I can count forward and backwards in 1s, 2s, 10s and 100s starting from any whole number up to one thousand (1,000).
5.1.8	I can count forward and backwards in steps of 3, 4, or 5 to and from any whole number less than or equal to fifty (50).	
5.1.9	I can count forward/backwards in steps of 25 (to/from any multiple of 25) and 50 (to/from any multiple of 50) up to five hundred (500).	
	N.A.	I can count forward/backwards in steps of 25 (to/from any multiple of 25) and 50 (to/from any multiple of 50) within five hundred (500).
5.1.10	I can recall the first ten multiples of the following numbers: 2, 3, 4, 5, 6, 8 & 10.	
	I can recall the first ten multiples of the following numbers: 2, 4, 5 & 10.	I can recall the first ten multiples of the following numbers: 2, 3, 4, 5, 6, 8 & 10.

	Year 3	Year 4
	I can recognise and name one half ($\frac{1}{2}$) and one quarter ($\frac{1}{4}$) and can recognise these in shapes and in a small numbers of objects.	
5.1.11	<p>I can recognise and name one half ($\frac{1}{2}$) of a whole shape which is divided into two equal parts.</p> <p>I can recognise and name one quarter ($\frac{1}{4}$) of a whole shape which is divided into four equal parts.</p>	<p>I can recognise and name one half ($\frac{1}{2}$) of a small number of objects.</p> <p>I can recognise and name one quarter ($\frac{1}{4}$) of a small number of objects.</p>
	I can associate 0.5 represents with one half ($\frac{1}{2}$).	
5.1.12	N.A.	I can associate 0.5 represents one half ($\frac{1}{2}$).
	I can recognise and name fractions (with denominator up to 12) that are parts of a whole (which is divided into equal parts).	
5.1.13	<p>I can recognise and name one half of a whole which is divided into two equal parts. (Use of Fraction Wall is recommended).</p> <p>I can recognise and name one quarter of a whole which is divided into four equal parts. (Use of Fraction Wall is recommended).</p>	<p>I can recognise and name fractions with denominator up to 12 that are parts of a whole which is divided into equal parts. (Use of Fraction Wall is recommended).</p>

	Year 3	Year 4
5.1.14	I can recognise and name simple equivalent fractions of a given fraction (with denominator up to 12).	
	I can recognise that two halves and four quarters make one whole. I can recognise that two quarters are equivalent to one half.	I can recognise and name equivalent fractions of a given fraction with denominator up to 12.
I can compare and order unit fractions up to $\frac{1}{12}$ and position them on a number line.		
5.1.15	N.A.	I can compare and order unit fractions up to $\frac{1}{12}$ and position them on a number line.
I can state one whole number lying halfway between two whole numbers.		
5.1.16	I can state whole numbers lying between two whole numbers up to one hundred (100).	I can state one whole number lying halfway between two whole numbers.
Assistive Technology & Other Resources		
5.1.17	I can use assistive technology (e.g. tablets & computers) and other learning resources (e.g. base ten material, beebot, Cuisenaire rods, fraction wall, number frames, number grid, number line, Unifix cubes) to learn about numbers and their properties	

LEVEL 5

Learning Area Outcome: I can calculate using mental methods, pencil and paper methods and assistive technology methods. I can check calculations by rounding numbers and making rough approximations. I can calculate to the most appropriate level of accuracy. I can also check the reasonableness of answers.

Subject Focus: Number – Numerical calculations

Whole Numbers, Decimal Numbers & Fraction Numbers - The Four Operations		
	Year 3	Year 4
5.2.1	I can add hundred (100) or one thousand (1,000) to any whole number.	
	N.A.	I can add hundred (100) or one thousand (1,000) to any whole number.
5.2.2	I recognise that I can add numbers in any order and get the same result.	
	I recognise that I can add numbers in any order and get the same result up to one hundred (100).	I recognise that I can add numbers in any order and get the same result up to ten thousand (10,000)
5.2.3	I can work out a small difference by counting up from the smaller to the larger number.	
	I can work out a small difference by counting up from the smaller to the larger number up to one hundred (100).	I can work out a small difference by counting up from the smaller to the larger number up to ten thousand (10,000).

	Year 3	Year 4
5.2.4	<p>I recognise that subtraction is the inverse of addition and vice versa. I can also state and write a subtraction statement corresponding to a given addition statement and vice versa.</p> <p><i>e.g. if $4 + 3 = 7$ then $7 - 3 = 4$ and vice versa.</i></p>	
5.2.5	<p>I can add/subtract any number by adding/subtracting a multiple of 10 and then adjusting accordingly.</p> <p><i>e.g. $24 + 9 = 24 + (10 - 1) = 34 - 1 = 33$.</i></p>	
	<p>I can add/subtract 9 or 11 by adding/subtracting 10 and then adjusting by 1.</p>	<p>I can add/subtract any number by adding/subtracting a multiple of 10 and then adjusting accordingly.</p>
5.2.6	<p>I can use column addition and subtraction with up to three-digit numbers.</p>	
	<p>N.A.</p>	<p>I can use column addition and subtraction with up to three-digit numbers.</p>
5.2.7	<p>I can work through situations involving addition and subtraction with two-digit numbers.</p>	
	<p>I can work through situations involving addition and subtraction with two digit numbers (total up to 100).</p>	<p>I can work through situations involving addition and subtraction with two digit numbers (total up to 100).</p>

	Year 3	Year 4
5.2.8	I can derive all pairs of 100 in multiples of 5 and 10.	
5.2.9	I can derive all number pairs that total one hundred (100).	
	N.A.	I can derive all number pairs that total one hundred (100).
5.2.10	I can derive all pairs of multiples of 50 with a total of one thousand (1,000).	
	N.A.	I can derive all pairs of multiples of 50 with a total of one thousand (1000).
5.2.11	I can derive all pairs of multiples of one hundred (100) with a total of one thousand (1,000).	
	N.A.	I can derive all pairs of multiples of one hundred (100) with a total of one thousand (1,000).
5.2.12	I recognise that multiplication is multiple groups (repeated addition).	
	I recognise that multiplication of 2, 4, 5 & 10 is multiple groups (repeated addition).	I recognise that multiplication of 2, 3, 4, 5, 6, 7, 8 & 10 is multiple groups (repeated addition).
5.2.13	I recognise that I can multiply numbers in any order and get the same result.	

Year 3		Year 3	
5.2.14	I associate division as equal sharing.		
	I associate division as equal sharing [$\times 2$, $\times 4$, $\times 5$, $\times 10$]	I associate division as equal sharing [$\times 2$, $\times 3$, $\times 4$, $\times 5$, $\times 6$, $\times 8$ & $\times 10$].	
I associate division as equal grouping (repeated subtraction).			
5.2.15	I associate division as equal grouping (repeated subtraction).		
	I associate division as equal grouping using 2, 4, 5 & 10.	I associate division as equal grouping using 2, 3, 4, 5, 6, 8 & 10.	
5.2.16	I recognise that division is the inverse of multiplication. I can also state and write a division statement corresponding to a given multiplication statement (2, 3, 4, 5 and 10 multiplication facts) and vice versa. <i>e.g. if $4 \times 3 = 12$ then $12 \div 3 = 4$ and vice versa.</i>		
	I recognise that division is the inverse of multiplication. I can also state and write a division statement corresponding to a given multiplication statement (2, 4, 5 and 10 multiplication facts) and vice versa.	I recognise that division is the inverse of multiplication. I can also state and write a division statement corresponding to a given multiplication statement (2, 3, 4, 5, 6, 8 and 10 multiplication facts) and vice versa.	
5.2.17	I can mentally multiply an integer by multiples of 10 and hundred (100).		
	I can mentally multiply an integer up to 10 (1-digit number) by 10.	I can mentally multiply an integer by multiples of 10 and hundred (100).	

	Year 3	Year 4
5.2.18	I recognise unit fractions (one half $\frac{1}{2}$, one quarter $\frac{1}{4}$) in shapes and numbers.	
	I recognise unit fractions (one half $\frac{1}{2}$, one quarter $\frac{1}{4}$) in shapes.	I recognise unit fractions (one half $\frac{1}{2}$, one quarter $\frac{1}{4}$) in numbers.
5.2.19	I can double whole numbers up to a total of one thousand (1,000)	
	I can double whole numbers up to a total of hundred (100).	I can double whole numbers up to thousand (1,000).
5.2.20	I can halve even numbers up to one thousand (1,000).	
	I can halve even numbers up to hundred (100).	I can halve even numbers up to one thousand (1,000).
5.2.21	I can recognise that halving is the inverse of doubling.	
5.2.22	I can find remainders after division (restricted to dividends up to 100 and divisors up to 10).	
	N.A.	I can find remainders after division (restricted to dividends of 2, 3, 4, 5, 6, 8, 10 & 100).

	Year 3	Year 4
5.2.23	<p>I can work through simple one-step situations using addition, subtraction, multiplication and/or division.</p> <p>I can also give a rough estimate of the answer of such situations and I can check the reasonableness of the answer.</p>	
	<p>I can work through simple one-step situations using addition [up to a total of 100], subtraction [within 100], multiplication [$\times 2$, $\times 4$, $\times 5$, $\times 10$] and/or division [$\times 2$, $\times 4$, $\times 5$, $\times 10$, no remainders].</p> <p>I can also give a rough estimate of the answer of such situations and I can check the reasonableness of the answer.</p>	<p>I can work through simple one-step situations using addition, subtraction, multiplication and/or division [$\times 2$, $\times 3$, $\times 4$, $\times 5$, $\times 6$, $\times 8$ & $\times 10$].</p> <p>I can also give a rough estimate of the answer of such situations and I can check the reasonableness of the answer.</p>
5.2.24	<p>I can round any whole two-digit number to the nearest ten and any three-digit number to the nearest one hundred (100).</p>	
	<p>I can round any whole number less than one hundred (100) to the nearest ten.</p>	<p>I can round any whole two-digit number to the nearest ten and any three-digit number to the nearest one hundred (100).</p>
5.2.25	<p>I can find fractions of a number.</p>	
	<p>I can find fractions (halves and quarters) of a number through concrete and pictorial representations.</p>	<p>I can find fractions of a number.</p>
5.2.26	<p>I can read and interpret scales involving whole numbers (e.g. number line & ruler).</p>	
	<p>I can read and interpret scales involving whole numbers (up to 100).</p>	<p>I can read and interpret scales involving whole numbers (up to 10,000).</p>

Money & Consumer Mathematics		
	Year 3	Year 4
5.2.27	I can recognise that 1 euro is equal to one hundred (100) cent.	
5.2.28		
	I can work out totals up to one hundred (100) euro and give the correct change.	
	I can work out totals up to 1 euro and give the correct change.	I can work out totals up to one hundred (100) euro and give the correct change.
5.2.29		
	I can handle small amounts of money in classroom situations (e.g. keeping track of money collected from small change for charity money collections). I can plan an activity within a given budget (e.g. using tickets, travel brochures, price lists, menus...). I can use receipts, simple menus, entrance tickets to work out totals and change. I recognise that prices marked as €0.99 are a marketing strategy to make prices more attractive.	
Assistive Technology & Other Resources		
5.2.30	I can use assistive technology (e.g. tablets & computers) and other resources (e.g. array cards, base 10 blocks, Cuisenaire rods, fraction wall, euro coins, ten frames, Unifix cubes) appropriate to this level to calculate and to learn about numerical calculations.	

N.B. Where/If not specified : Number work in Year 3 is up to one hundred (100) and Year 4 up to ten thousand (10,000).

LEVEL 5

Learning Area Outcome: I can recognise and describe patterns and relationships in various mathematical ways and can use algebraic manipulations.

Subject Focus: Algebra – Fundamentals of Algebra

	Year 3	Year 4
5.3.1	I can recognise and extend simple pictorial patterns and number sequences formed by counting any positive integer in constant steps.	
5.3.2	I can recognise the use of an empty box symbol to stand in for an unknown number and can find the unknown number.	
Assistive Technology & Other Resources		
5.3.3	I can use assistive technology (e.g. tablets & computers) and other resources (e.g. array cards, bar model, equation balance, ten frames) appropriate to this level to learn about the fundamentals of algebra.	

LEVEL 5

Learning Area Outcome: I understand and can use forms of measurement and can make reasonable estimations.

Subject Focus: Shape, Space & Measures – Measures

Angles		
	Year 3	Year 4
5.4.1	I can show and label the four compass points.	
	N.A.	I can show and label the four compass points.
5.4.2	I can recognise and illustrate that a right angle is a quarter ($\frac{1}{4}$) of a whole turn.	
	I can also recognise such angles in 2D shapes and in the environment.	
5.4.3	I can make and describe right angle turns including turns between the four compass points.	
	N.A.	I can make and describe right angle turns including turns between the four compass points.
5.4.4	I can recognise, measure and draw angles of 90° and 180° without the use of a protractor.	
	N.A.	I can recognise, measure and draw angles of 90° and 180° without the use of a protractor.

	Year 3	Year 4
5.4.5	I can compare an angle with a right angle.	
Length, Area, Volume, Mass & Capacity		
	Year 3	Year 4
5.4.6	I can define the length of an object as a measure of the distance between the endpoints of an object.	
	I can define the length of an object as a measure of the distance between the endpoints of an object up to 1 metre (m).	I can define the length of an object as a measure of the distance between the endpoints of an object.
5.4.7	I can define the mass of an object as a measure of the amount of material in an object.	
	I can define the mass of an object as a measure of the amount of material in an object using non-standard units.	I can define the mass of an object as a measure of the amount of material in an object using standard units.
5.4.8	I can define the capacity of a container as the total amount of fluid that can be poured into the container.	
	I can define the capacity of a container as the total amount of fluid that can be poured into the container using non-standard units.	I can define the capacity of a container as the total amount of fluid that can be poured into the container using standard units.
5.4.9	I can read and write the vocabulary related to length, mass & capacity.	

	Year 3	Year 4
5.4.10	<p>I know the standard metric units of length (kilometres, metres, centimetres & millimetres), mass (kilograms & grams); and, capacity (litres & millilitres).</p> <p>I also know the abbreviations of these standard units and I understand the relationships between different units of the same measure.</p>	
	<p>I know the standard metric units of length (metres & centimetres).</p> <p>I also know the abbreviations of these standard units and recognise the relationships between them.</p>	<p>I know the standard metric units of length (kilometres, metres, centimetres & millimetres), mass (kilograms & grams); and, capacity (litres & millilitres).</p> <p>I also know the abbreviations of these standard units and I understand the relationships between different units of the same measure.</p>
<p>I can estimate, measure and compare lengths, masses and capacities.</p>		
5.4.11	<p>I can estimate, measure and compare lengths (using non-standard units and standard units), masses and capacities (using non-standard units only)</p>	<p>I can estimate, measure and compare lengths, masses and capacities.</p>
	<p>I can use the decimal notation to express measures of length, mass and capacity.</p>	
5.4.12	N.A.	<p>I can use the decimal notation to express measures of length, mass and capacity.</p>
	<p>I can convert and use larger to smaller standard metric units of mass (kg, g), length (km, m, cm, mm) & capacity (l, ml), and vice versa.</p>	
5.4.13	N.A.	<p>I can convert and use larger to smaller standard metric units of mass (kg, g), length (km, m, cm, mm) & capacity (l, ml), and vice versa.</p>

	Year 3	Year 4
5.4.14	I can suggest and use measuring equipment to estimate and/or measure length, mass and capacity.	
	I can suggest and use measuring equipment to estimate and/or measure length.	I can suggest and use measuring equipment to estimate and/or measure length, mass and capacity.
5.4.15	I can draw a line to the nearest centimetre.	
Time		
	Year 3	Year 4
5.4.16	I can read and write the vocabulary related to time.	
5.4.17	I can use standard units of time and know the relationships between them.	
5.4.18	I can read and write time to the hour/half hour.	

Year 3		Year 4	
5.4.19	I can read, write and use the 12-hour clock (analogue and digital) to 5 minutes. [terms 'past' and 'to' are not mandatory]		
	N.A.	I can read, write and use the 12-hour clock (analogue and digital) to 5 minutes. [terms 'past' and 'to' are not mandatory]	
5.4.20	I can draw hands on the clock face to show time.		
	I can draw hands on the clock face to show hour/half hour.		I can draw hands on the clock face to show time.
5.4.21	I can use a.m. and p.m.		
	N.A.	I can use a.m. and p.m.	
5.4.22	I can determine a time interval (hour/half hour) from an o'clock time.		
	N.A.	I can determine a time interval (hour/half hour) from an o'clock time.	
5.4.23	I can read and use a calendar.		

Assistive Technology & Other Resources

5.4.24

I can use assistive technology (e.g. tablets, computers, Bee-bots & Pro-bots) and other resources (e.g. 2D plastic shapes, clocks, measuring tools & instruments, navigation compass, set squares, timeline) appropriate to this level to learn about measures.

LEVEL 5

Learning Area Outcome: I can recognise and describe the properties of shapes. I can use these properties to construct shapes using appropriate mathematical instruments and to prove given geometric statements.

Subject Focus: Shape, Space & Measures – Euclidean Geometry

Lines & Line Segments		
	Year 3	Year 4
5.5.1	I can recognise and draw examples of straight and curved lines.	
Triangles		
5.5.2	I can recognise, name, draw and describe the simple 2D shape: the triangle.	
Quadrilaterals		
5.5.3	I can recognise, name, sketch and describe the simple 2D shapes: the square and the rectangle.	
Polygons		
5.5.4	I can sort, and classify simple 2D shapes using their various properties.	

3D Shapes		
	Year 3	Year 4
5.5.5	I can recognise and name the simple 3D shapes: the cube and the cuboid.	
Assistive Technology & Other Resources		
5.5.6	I can use assistive technology (e.g. tablets & computers, Pro-bots) and other resources (e.g. 2D & 3D plastic shapes) appropriate to this level to learn about measures	

LEVEL 5

Learning Area Outcome: I can describe position and movement of shapes in a plane

Subject Focus: Transformation Geometry

Movement		
	Year 3	Year 4
5.6.1	I can distinguish between right, left, up and down and can move an object in each of these directions. I can also describe the movement of the object in each of these directions.	
5.6.2	I can read and write the vocabulary related to position, direction and movement.	
	I can read and write the vocabulary related to position, direction (clockwise or anti-clockwise) and movement.	I can read and write the vocabulary related to position, direction and movement.
5.6.3	I can describe and find the position of a square on a grid of squares with rows and columns labelled.	
Reflections		
5.6.4	I can recognise shapes with no, one and two lines of symmetry.	
5.6.5	I can identify and draw lines of symmetry in simple 2D shapes.	

	Year 3	Year 4
5.6.6	I can draw the other half of a simple symmetrical object inspired by examples of symmetry in nature.	
	N.A.	I can draw the other half of a simple symmetrical object inspired by examples of symmetry in nature.
5.6.7	I can recognise reflective symmetry in a square.	
	N.A.	I can recognise reflective symmetry in a square
Rotations		
5.6.6	I can describe right angle rotations.	
	N.A.	I can describe right angle rotations.
Assistive Technology & Other Resources		
5.6.7	I can use assistive technology (e.g. tablets, computers, Bee-bots & Pro-bots) and other resources (e.g. 2D & 3D plastic shapes) appropriate to this level to learn about transformation geometry.	

Level 5

Learning Area Outcome: I can collect, analyse, interpret and communicate statistical information

Subject Focus: Data Handling & Chance – Statistics

	Year 3	Year 4
5.7.1	I can collect, sort, organise (including tally) and classify data in a table.	
5.7.2	I can read and interpret a frequency table.	
5.7.3	I can complete a frequency table.	
	N.A.	I can complete a frequency table.
5.7.4	I can read and interpret a block graph.	
5.7.5	I can construct a block graph.	
	N.A.	I can construct a block graph.
5.7.6	I can work through a situation by representing and interpreting data in tables, graphs and charts.	

5.7.7	I can read and interpret a pictograph where the symbol represents one or two units.	
5.7.8	I can draw a pictograph where the symbol represents one or two units.	
	N.A.	I can draw a pictograph where the symbol represents one or two units.
5.7.9	I can read and interpret a Carroll diagram.	
5.7.10	I can use assistive technology (e.g. tablets & computers) and other learning resources to learn about statistics.	