MATHEMATICS

Year 7 CCP

MATHEMATICS DEPARTMENT

Learning Outcomes Framework

SEPTEMBER 2022

	Strand 1
Learning Area Outcome: I understand the structure of the number system and the relationship between numbers. **Subject Focus: Number – The number system**
1	I can read and write whole numbers to 100 in figures and words.
2	I can recognise, read and position whole numbers up to 100 on a number line.
3	I can recognise the place value of any digit in a whole number up to 100.
4	I can compare and order whole numbers up to 100 and include symbols such as <, > or =.
5	I can read, say, order and write ordinal numbers up to 31.
6	I can identify odd and even numbers to 100.
7	I can count forward in steps of 1s, 2s, and 10s starting from any whole number. (Working between 0 and 100)
10	I can recall the first ten multiples of the numbers 2, 5 and 10.
24	I can recognise what a half and a quarter are and can identify them in shapes and in small numbers of objects.
28	I can recognise that halves and quarters are part of a whole.
30	I can recognise that two halves and four quarters make one whole, that is $\frac{2}{2} = 1$ and $\frac{4}{4} = 1$. I can recognise that two quarters are equivalent to one half, that is $\frac{2}{4} = \frac{1}{2}$.
37	I can state one whole number lying between two whole numbers up to one hundred.
	Assistive Technology & Other Resources
41	I can use assistive technology (e.g. tablets and computers) and other learning resources (e.g. Cuisenaire rods, Unifix cubes, base 10 blocks) to learn about numbers and their properties.

	Strand 2
	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
2	I recognise that I can add numbers in any order and get the same result.
3	I can work out a small difference by counting up from the smaller to the larger number.
6	🔴I can use column addition and subtraction with up to two-digit numbers.
7	🔴I can work through situations involving addition and subtraction of up to two digit numbers, (total up to 100).
8	I can derive all pairs of numbers in multiples of 10 and 5 that add up to 100.
12	🔴I can identify multiplication as repeated addition.
13	🔴I recognise that I can multiply two numbers in any order and get the same result.
14	🔴I can describe division as equal sharing.
15	🔴I can describe division as equal grouping (repeated subtraction).
18	I recognise unit fractions (one half and one quarter) and use them to find fractions of shapes and number of objects that are in multiples of 2 and 4.
19	I can double whole numbers between 1 and 50.
20	I can halve even numbers up to 100.
23	I can work through simple one-step situations using addition (up to a total of 100), subtraction (within 100), multiplication and/or division by 2, 5, and 10, with no remainders.
24	I can round any whole number less than 100 to the nearest ten.
33	I can work out multiplication of whole numbers by 2, 5 and 10 whose result does not exceed 100.

46	I can read and interpret scales involving whole numbers (up to 100).
65	I know that 1 euro is equal to 100 cent.
66	I can work out totals up to a hundred euro and give the correct change using integers.
67	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 know that prices marked as €0 .99 are a marketing strategy to make prices more attractive.
Assistive Technology & Other Resources
76	I can use assistive technology (e.g. tablets, and computers) and other resources (e.g. Cuisenaire rods, Unifix cubes, base 10 blocks) appropriate to this level to calculate and to learn about numerical calculations.

Strand 3	
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**
1	I can recognise and extend simple pictorial patterns and number sequences formed by counting any positive integer in constant steps.
16	I can use an empty box symbol to stand in for an unknown number and can find the unknown number.
Assistive Technology & Other Resources
52	I can use assistive technology (e.g. tablets and computers) and other resources appropriate to this level to learn about the fundamentals of algebra.

Strand 4

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

Subject Focus: Shape, Space & Measures – Measures

	Angles
3	I recognise that a right angle is a quarter of a whole turn. I can also recognise such angles in 2D shapes and in every day life.
6	I can compare an angle with a right-angle.

	Length and Mass
12	I know that the length of an object is a measure of distance between the endpoints of an object.
13	I know that the mass of an object is a measure of the amount of material in the object.
17	📖 I can read and write vocabulary related to length (e.g. longer, shorter, taller, and higher) and mass (e.g. weight, heavier and lighter).
18	🔴 I know the standard metric units of length (kilometres, metres, centimetres and millimetres) and mass (kilograms and grams). I know the abbreviations of these standard units and I can work out the conversion from integral values of metres to centimetres and centimetres to millimetres.
19	🔴 I can measure and compare lengths and masses.
22	I can suggest and use measuring equipment to measure length and mass.
23	I can draw a line to the nearest cm.

	Time
43	📖 I can read and write vocabulary related to time (hours, minutes, seconds, o'clock and half past, days of the week, months of the year).
44	I can use standard units of time, and know the relationship between hours and minutes.
47	I can read and use the 12-hour digital clock for time to the hour and half hour (analogue and digital).
50	📖 I can read and use a calendar.
52	🔴 I can measure time using seconds, minutes and hours using sand timers, clock, stop watch, etc.

	Assistive Technology & Other Resources
54	I can use assistive technology (e.g. tablets, computers and calculators) and other resources (e.g. plastic money, 2D and 3D plastic shapes, measuring instruments, sand timers, clocks, stopwatches.) appropriate to this level to learn about measures.

Strand 5

Strand 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

2D and 3D shapes	
1	I can recogise and draw examples of straight and curved lines.
7	I can recognise, name and draw a triangle, and describe it as a three-sided shape.
12	I can recognise, name, describe and draw the square and the rectangle.
15	I can sort and classify simple 2D shapes.
18	🔴 I can recognize and name the cube and the cuboid.
22	I can recognise, name, describe and draw the circle freehand or using a circular object.
Assistive Technology & Other Resources	
34	I can use assistive technology (e.g. tablets and computers) and other resources (e.g. 2D and 3D plastic shapes) appropriate to this level to learn about properties of shapes.

Strand 6

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

Subject Focus: Shape, Space & Measures – Transformation Geometry

Movement	
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.
3	I can describe and find the position of an object on a grid of squares with rows and columns eg. (B3)
Reflections	
5	I can identify and draw lines of symmetry in simple 2D shapes and pictures.
6	I can recognise shapes with no, one and two lines of symmetry
7	I can draw the other half of a simple symmetrical shape.
Assistive Technology & Other Resources	
21	I can use assistive technology (e.g. tablets and computers) and other resources (e.g. 2D and 3D plastic shapes) appropriate to this level to learn about transformation geometry.

	Strand 7
	Learning Area Outcome: I can collect, analyse, interpret and communicate statistical information **Subject Focus:** Data Handling & Chance – Statistics
1	I can collect, sort, organise and classify data in a table.
2	I can read and interpret a frequency table.
3	I can complete a frequency table.
4	🔴I can read and interpret a block graph.
5	💡🔴📘I can construct a block graph.
	Assistive Technology & Other Resources
23	I can use assistive technology (e.g. tablets, computers and calculators) and other learning resources to learn about statistics.