



Explorer

Explorer Curriculum – Building block to Formal Curriculum

- The building block before a fully formal curriculum.
- Strong focus on Early Literacy and Numeracy.
- Key skills and knowledge to understand the world around them.
- Functional Skills to apply basic knowledge.
- For children with moderate learning difficulties, autism and other learning needs. Learning takes place through tangible 'real life situations' with regular revisiting of learning.
- Students follow an Entry Level (1-3) Pathway at KS4 and KS5.

Explorer Curriculum

	2020 – 2021 Autumn 1 Unit 1	2020 – 2021 Autumn 2 Unit 2	2020 – 2021 Spring 1 Unit 3	2020 – 2021 Spring 2 Unit 4	2020 – 2021 Summer 1 Unit 5	2020 – 2021 Summer 2 Unit 6
Topic	N1 Whole Numbers & Calculations: N1b N1d N2 Fractions, Percentages & Decimals: N2d N2g	N3 Multiples: N3a N4 Estimation & Approximation: N4c N4e	N6 Formulae: N6a N6c N7 Scales & Graphs: N7a N7c	S1 Shapes & Solids: S1a S1b R449 Coursework Completion	S3 Units & Measures: S3e S3f S3l	D1 Lists & Outcomes: D1c D1d D2 Averages & Trends: D2b D2d

Key Questions:

What other vocabulary is associated with addition and subtraction. Can you solve problems involving addition and subtraction.

Skills and Knowledge**N1 Whole Numbers & Calculations:****N1b**

EL1 – Understand vocabulary associated with numerical calculations such as add, subtract, plus, minus, take-away, double.

EL2 – Understand vocabulary associated with numerical calculations such as multiply, times, half, divide.

EL3 – Understand vocabulary associated with numerical calculations such as sum, difference, share, total, twice, triple.

N1d

EL1 – Use appropriate objects or number line to subtract a single digit number from a starting value no greater than 20.

EL2 – Subtract a single digit number from an initial value no greater than 100.

EL3 – Subtract whole numbers from an initial value no greater than 1000.

N2 Fractions, Percentages & Decimals:**N2d**

EL2 – Order one digit decimals.

EL3 – Order decimals and fractions.

N2g

EL2 – Find 50%, 25% and 10% of two digit numbers, limited to results which are whole number answers.

EL3 – Find 1%, 25% and 10% of two digit numbers, limited to results which are whole number answers.

Find other percentage quantities by combining results.

Key Questions:

What is meant by double? What is meant by halving. Can you recall multiplication facts? What is inverse?

Skills and Knowledge**N3 Multiples:****N3a**

EL1 – Know and use multiplication of numbers up to 10 by 2. Understand and use the term 'double'.

EL2 – Know and use multiplication of numbers up to 10 by 3, 4, 5 and 10.

EL3 – Know and use multiplication of whole numbers up to 12 x 12 and use this knowledge in multiplication and division problems.

N4 Estimation & Approximation:**N4c**

EL2 – Perform simple calculations where the units of quantities are whole numbers of hundreds.

EL3 – Perform simple calculations where the units of quantities are whole numbers of thousands or millions.

N4e

EL1 – Use estimation to explain whether a number of items (no more than five) can be bought for £20.

EL2 – Estimate approximate total cost and expected change for a number of items (no more than ten) to be bought.

EL3 – Estimate approximate cost of a list of multiple items to determine if purchases can be made within a stated budget.

Assessment outcomes.

Students should be able to use multiplication facts across a number of different problems.

Key Questions:

What is a sequence. Can you describe the rule between numbers?

Skills and Knowledge**N6 Formulae:****N6a**

EL1 – Complete a sequence increasing by 2. Given in words, numbers or as a spatial pattern.

EL2 – Complete a sequence increasing or decreasing by 2, 3, 5 or 10.

EL3 – Complete sequences of increasing or decreasing integers where the common difference is less than 10 or a multiple of 10.

N6c

EL1 – Use the terms first, second, third, fourth, fifth including sequencing events.

EL2 – Use a simple one step function machine to determine outputs for given inputs.

EL3 – Use a simple two-step function machine to determine outputs for given inputs.

N7 Scales & Graphs:**N7a**

EL1 – Read and mark a scale or dial whose divisions represent 1 unit, which are labelled in 1's or 2's (numbers up to 20).

Read linear scales in familiar contexts.

EL2 – Read and mark a scale or dial whose divisions are labelled and represent 2, 5 or 10 units.

Read dial and scales in familiar contexts.

EL3 – Read and mark a scale or dial whose divisions are labelled appropriately.

N7c

EL1 – Interpret graphs representing a simple sequence or proportional relationship.

EL2 – Interpret graphs in real-world contexts, e.g. money conversion, cost-time.

EL3 – Construct and interpret graphs in real-world contexts. E.g. distance -time, money, conversion, cost-time.

Assessment outcomes.**Key Questions:**

Can you sort shapes into 2d and 3d shapes? Describe some of the properties of 2d and 2d shapes?

Skills and Knowledge**S1 Shapes & Solids:****S1a**

EL1 – Sort and classify solids using language related to angles and sides e.g. straight, right angle, acute, obtuse, curved, corners, perpendicular, parallel, arc.

Know and use names for basic shapes, e.g. triangle, rectangle, square, circle.

EL2 – Sort and classify polygons by number of sides, e.g. triangle, quadrilateral, pentagon, hexagon.

Distinguish between different triangles (equilateral, isosceles, right angled and scalene).

EL3 – Distinguish between different quadrilaterals (square, rectangle, kite, trapezium, parallelogram and rhombus).

S1b

EL1 – Sort and classify solids using language related to angles, edges and faces, e.g. straight, right angle, acute, obtuse, curved, corners, perpendicular, parallel.

EL2 – Know and use the terms side, edge, corner, square face, rectangular face, triangular face, cube, cuboid, cross-section, pyramid, sphere, cone, cylinder.

EL3 – Identify pictures of 3D objects.

Identify and sketch nets of cuboids.

Assessment outcomes.

Students should understand different shapes, and orientation.

Key Questions:

Can you use a protractor? Can you identify simple angles? Can you name some angles?

Skills and Knowledge**S3 Units & Measures:****S3e**

EL1 – Recognise 90 degree angles in common shapes. Recognise parallel and perpendicular lines in common shapes.

Estimate size of an angle about a point up to 90 degrees.

EL2 – Recognise angles greater than, equal to and less than 90 degrees in shapes.

Measure acute angles to the nearest 10 degrees using a protractor.

EL3 – Know and use the terms 'acute', 'obtuse' and 'reflex' to describe angles.

Measure angles to +/- 2 degrees.

S3f

EL1 – Use a ruler to draw right angles triangles and rectangles of given side lengths on squared paper.

EL2 – Use a ruler and protractor to draw and measure triangles accurately: side, angle, side/angle, side, angle.

EL3 – Use a ruler and protractor to draw and measure polygons, up to hexagons.

S3i

EL1 – Read scales showing temperatures from zero.

EL2 – Compare positive integer temperatures.

EL3 – Read scales showing temperatures above and below zero and compare temperatures.

Assessment outcomes.

Students should start to use different maths equipment (protractor) and begin to think about different measuring units.

Key Questions:

Can you use a simple tally notation? Can you identify simple outcomes from a list.

Skills and Knowledge**D1 Lists & Outcomes:****D1c**

EL1 – Tally objects using recognized notation.

EL2 – Understand and complete a tally chart including numerical frequency.

D1d

EL1 – Extract information from a frequency table.

EL2 – Complete or extract information from lists with a maximum of two columns or two rows.

EL3 – Complete or extract information from printed lists more than two columns or rows.

D2 Averages & Trends:**D2b**

EL1 – Draw and interpret a pictogram with scale in 1's or 2's.

EL2 – Draw and interpret a pictogram with scale in multiples of 2, 4, 5 or 10.

EL3 – Draw and interpret pictograms.

D2d

EL1 – Interpret most common category from a frequency diagram, including bar charts, pictograms and pie charts.

EL2 – Understand and use 'range' as the difference between the biggest and smallest recorded values on an appropriate frequency diagram.

EL3 – Understand and use 'median' as the middle item in a cumulative count of items using an appropriate frequency diagram.

Assessment outcomes.

Student should be able to extract information from different sources.

**Assessment
outcomes.**

Correctly use
different language
associated to the
application of maths.
Pupil should be able
to identify numbers
across (upto) 1000.

Students should
understand different
number patterns.