

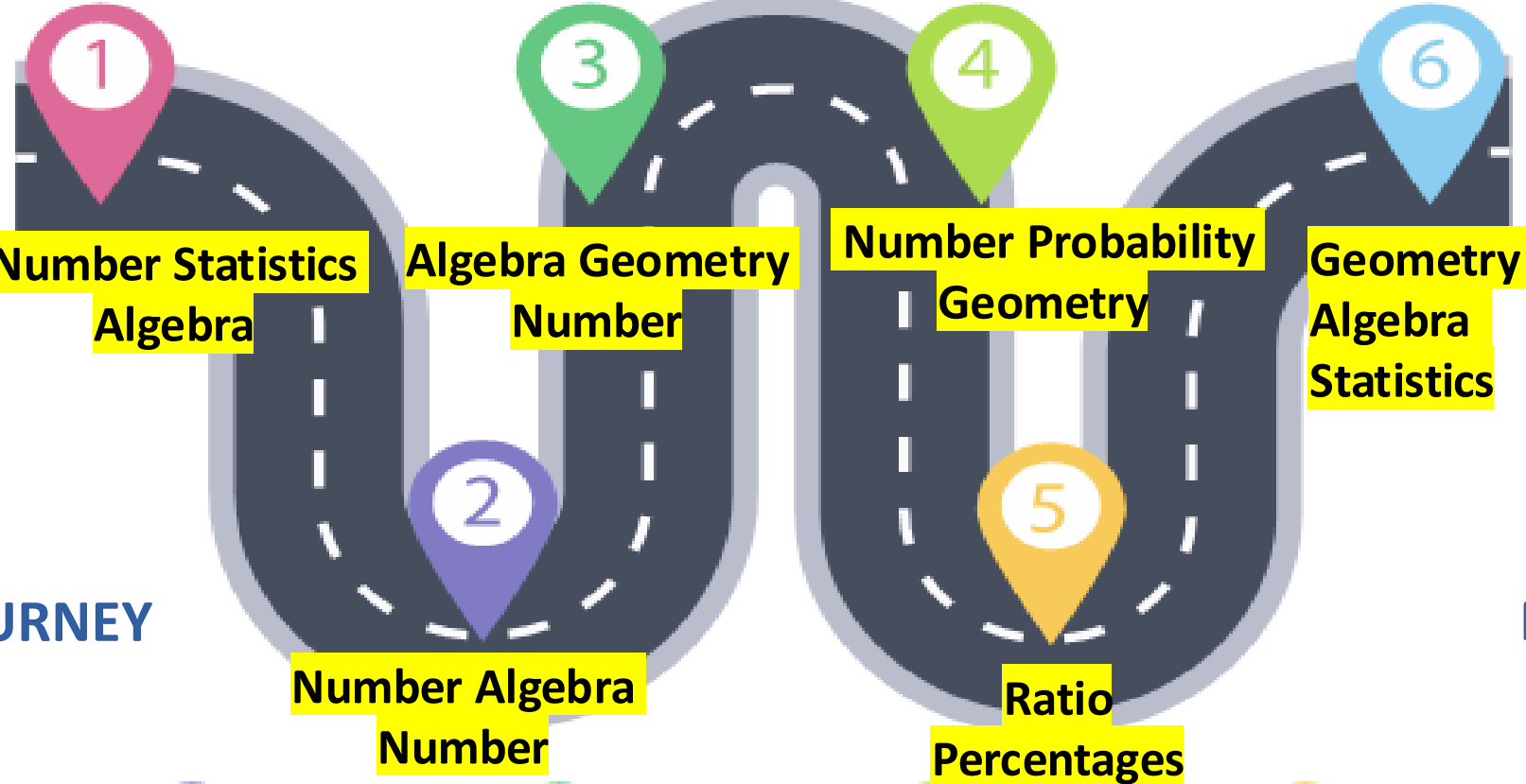


Prior learning

Future learning

LEARNING JOURNEY

Maths Year 7



1

2

3

4

5

6

Number
Time/timetables, negative numbers, money.
Statistics
Mode, Median, Mean and Range
Data tables and diagrams.

Number
Squares & square roots, rounding, BIDMAS.
Algebra
Expressions, Equations, simplifying and using Formula.
Number
Multiplying, dividing, calculations, estimations

Algebra
Co-ordinates, graphs
Geometry
Perimeter, area, converting units of length.
Number
Fractions, comparing using inequality symbols.

Number
Adding, subtracting fractions.
Probability
Simple probability
Geometry
Angles, triangles and quadrilaterals.

Number
Ratio, comparing quantities, percentages and fractions of amounts.
Number
Fractions, decimals and percentages increase and decrease.

Geometry
Transformations, reflections and rotations.
Algebra
Function machines, sequences, special sequences
Statistics
Pie charts, averages mean, mode, median and range questionnaires.

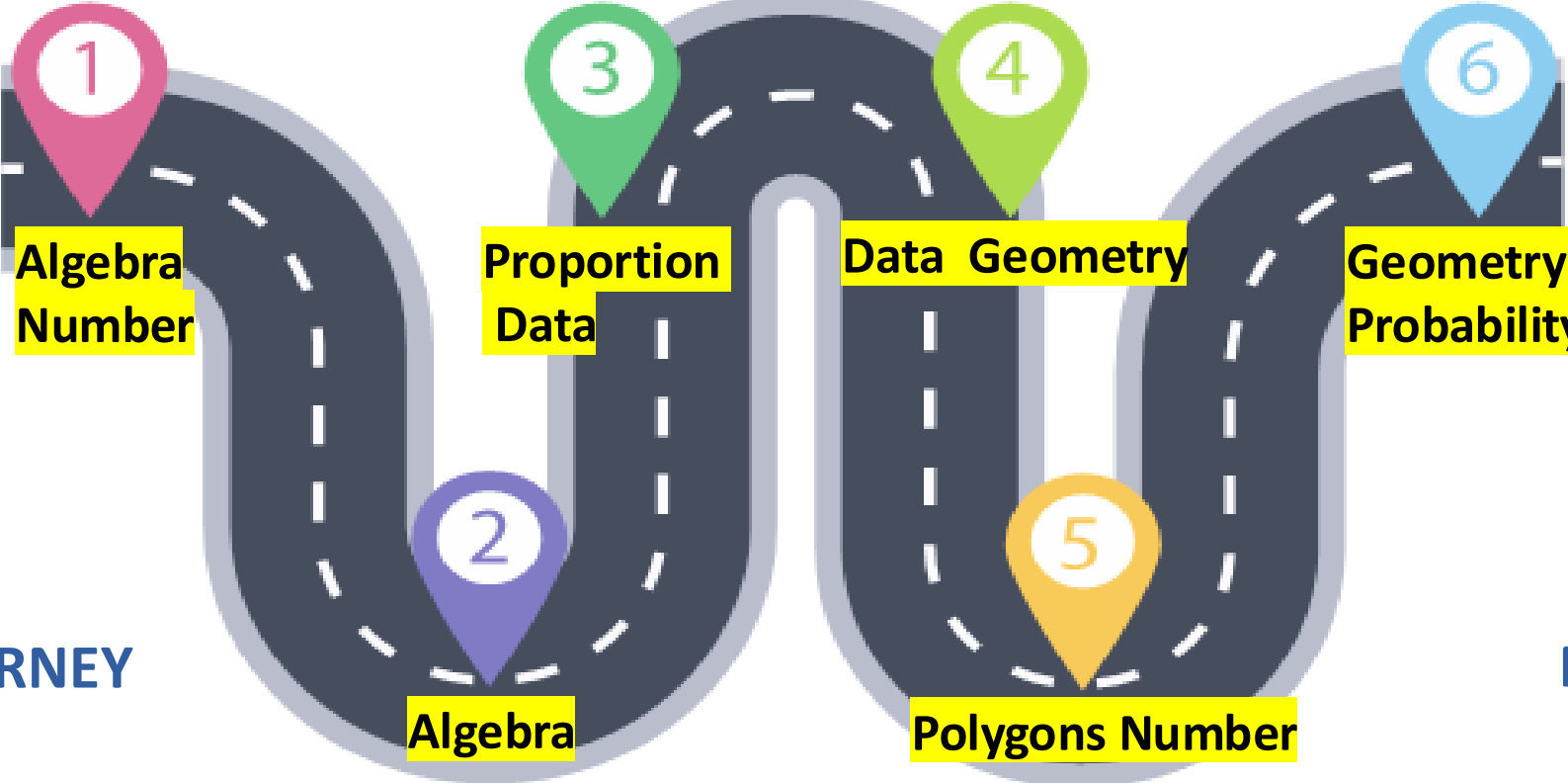


Prior learning

Future learning

LEARNING JOURNEY

Maths Year 8



1

2

3

4

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Algebra
Simplifying, expanding brackets, index notations.
Geometry
Angles, rotations, translations.
Probability
Scale, mixed events, sample space, experimental.
Number
Powers of ten, rounding (sf) estimations, problem solving.

Algebra
Function machines, using the nth term, sequences.
Algebra
Co-ordinates patterns, plotting linear and curved lines.
Algebra
Solving equations, equations with brackets, substitution.

Proportion
Direct- indirect proportions
Ratio simplifying and sharing, fractional ratio.
Proportion
Calculating percentage, increasing, decreasing and change.

Data
Frequency tables, and diagrams, calculating the mean from a table, grouped data, comparing averages.
Geometry
Area, rectangles, triangles, parallelograms and compound shapes.

Polygons
Calculating the sum of interior, exterior angles
Using the formula to calculate interior angles.
Number
Fractions adding, subtracting, multiplying, dividing, multiplying and dividing by powers of ten.

Geometry
Angles in triangles and quadrilaterals, rotations and translations.
Probability
Using the probability scale, mixed events, sample space diagrams, experimental probability.

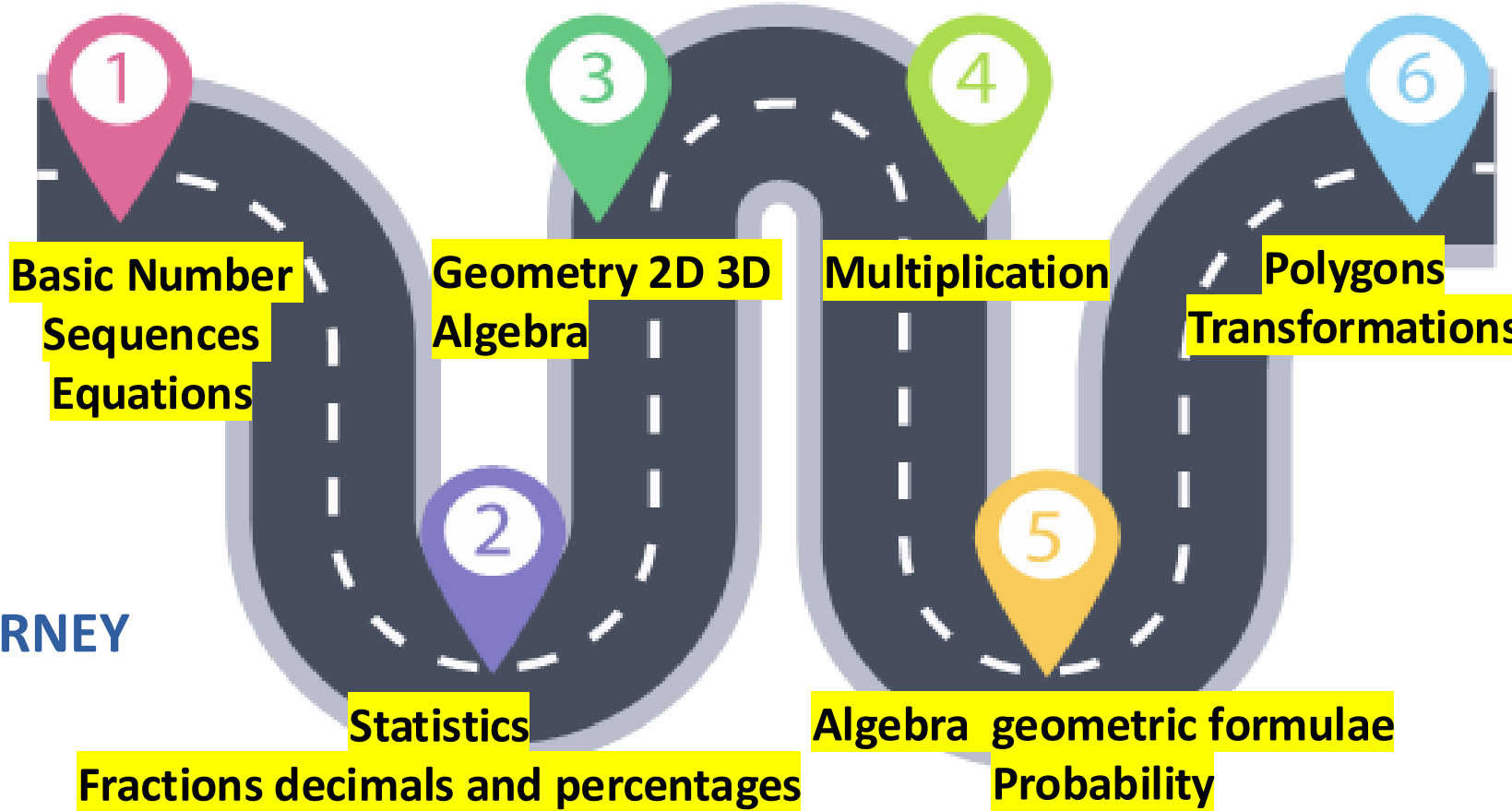


Prior learning

Future learning

LEARNING JOURNEY

Maths Year 9
Foundation



1

2

3

4

5

6

Number and calculations
Multiplying, dividing integers and decimal numbers, prime factors, HCF, LCM
Sequences and equations
Linear sequences, term to term rules and problem solving.

Statistics
Mean, median, range, two-way tables, group, discrete, continuous data.
FDP and Percentages
Adding, subtracting, multiplying and dividing. Calculating percentages, increase, decrease.

Geometry 2D, 3D
Identifying angles, alternate, corresponding, bisecting lines and angles
Algebra and real-life graphs
Plotting and interpreting graphs intercept and gradient of a line, finding the midpoint of a line segment.

Multiplicative Reasoning
Simplifying ratio, share ratio, problem solving, inverse proportion, converting between metric and imperial measurements

Algebra and geometric formulae
Substitution, solving equations, inverse formulae, area and circumference of circles.
Probability
Experimental and theoretical, tree diagrams.

Polygons and transformations
Properties of quadrilaterals, Calculating missing sides in triangles, transformations, enlargements, congruency.
Revision for end of year exam



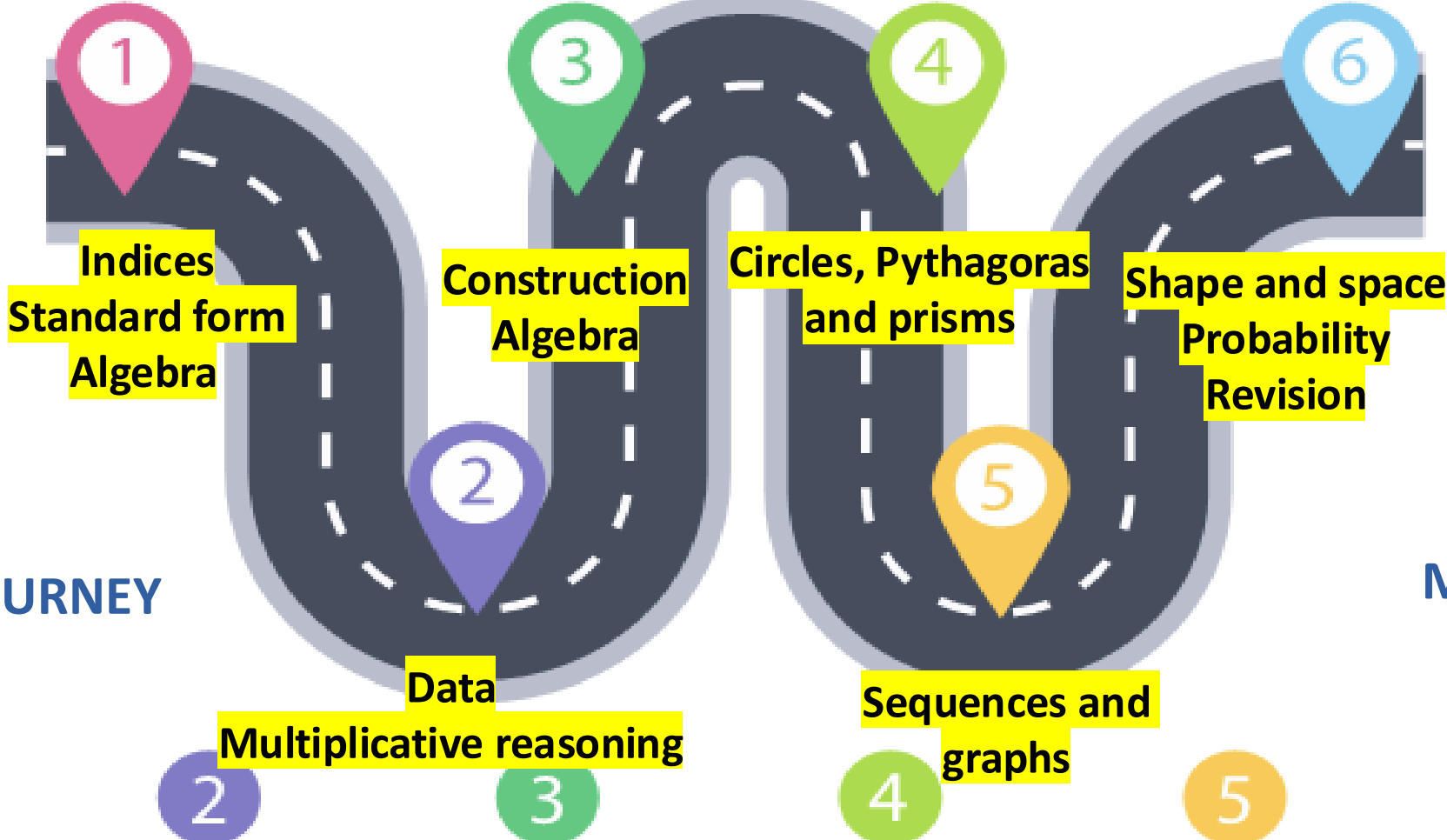
Prior learning



Future learning

LEARNING JOURNEY

Maths Year 9
Higher



1

2

3

4

5

6

Indices, standard form
Index laws, estimations, calculate combinations of powers, fractions, brackets, writing vaules using standard form.
Expressions and formulae
Substitution, into expressi ons expanding and factorising.

Data
Dealing with grouped data, estimated mean, frequency polygons.
Multiplicative reasoning
Scale factor, inverse operations, percentage change, ratio and scale factor, problem solving.

Construction
Drawing to scale, accurate constructions, maps and diagrams
Algebra
Equations unknowns on both sides, solving linear inequalities, proportional, solving a pairs simultaneous equations.

Circles, Pythagoras and prisms
Area and circumference, volume and surface area, upper and lower bounds, Pythagoras theorem, calculating percentage error intervals.

Sequences and graphs
Nth term rule, recognising geometric and quadratic sequences, interpreting and drawing graphs, rearranging equations $y=mx+c$, inverse functions, solving simultaneous equations, interpreting quadratic functions.

Comparing shapes
Using congruent shapes to solve problems, working out the tangent of an angle.
Probability
Revision for end of year exam

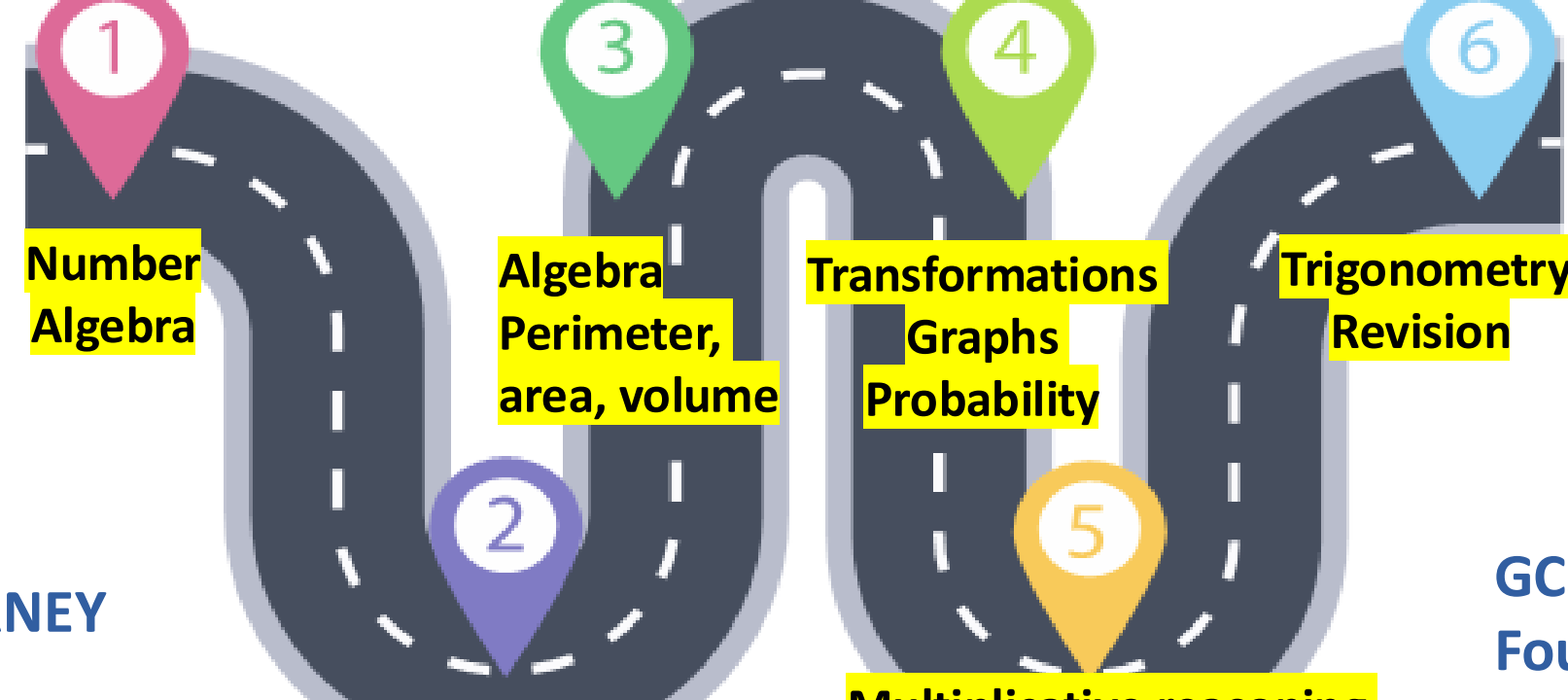


Prior learning

Future learning

LEARNING JOURNEY

GCSE Year 10
Foundation Maths



Number
Algebra

Algebra
Perimeter,
area, volume

Transformations
Graphs
Probability

Trigonometry
Revision

Graphs tables, charts
Fractions and percentages

Multiplicative reasoning
Construction, loci, bearings
Averages

1

2

3

4

5

6

Number
Calculations, rounding, estimations, identifying primes, HCF, LCM, squares, cubes and roots.
Algebra
Simplifying, expanding brackets, index laws, substitution, factorising.

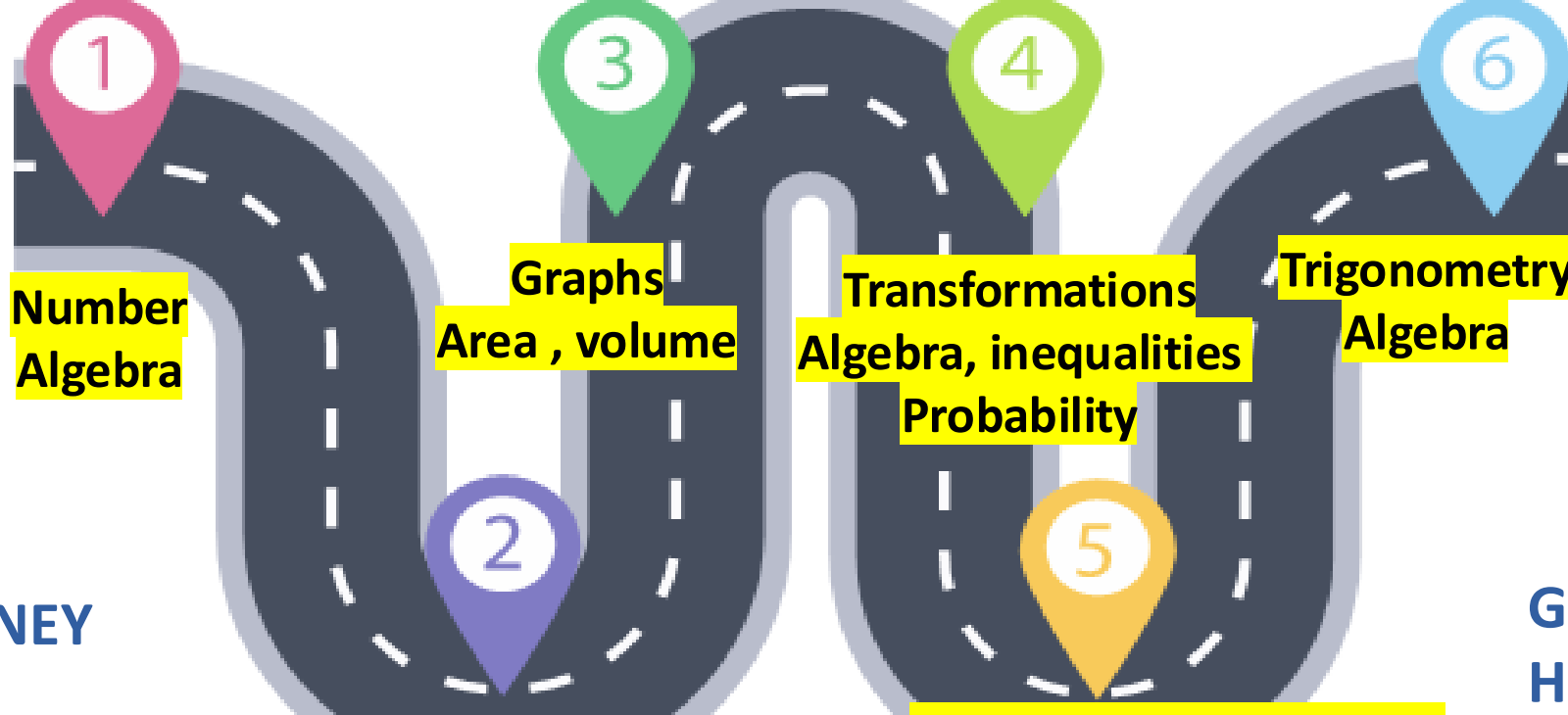
Graphs, tables and charts
Reading data, histograms, scatter graphs, pie charts.
Fractions and percentages
Calculations using fractions, Converting between unit, percentage increase, decrease, calculating VAT.
Angles
Properties and problem solving.

Algebra
Equations, inequalities and sequences.
Perimeter Area and volume
Surface area of 2D and 3D shapes.

Transformations, reflections, rotations, translations, enlargements.
Graphs
Plotting linear graphs, problems solving using $y=mx+c$
Probability
Simple and experimental probability, Venn and tree diagrams.

Multiplicative reasoning
Calculating percentage, profit, loss, increase and decrease, SDT calculations.
Construction, loci, bearings
Properties of 2D, 3D shapes.
Averages and range
Mean, mode median and range.

Trigonometry, Pythagoras theorem.
Trigonometry, calculations using sine and cosine rules.
Revision for end of year exams



Prior learning

Future learning

LEARNING JOURNEY

GCSE Year 10
Higher Maths

Data, Fractions, ratio, percentages
Angles, trigonometry

Multiplicative reasoning
Similarity, congruence
Statistics

1

2

3

4

5

6

Number
HCF, LCM
Estimations, powers and roots, index laws, standard form
Algebra
Simplifying, expanding, solving equations, nth term, expanding double brackets, factorising quadratics

Data
Stem and leaf, pie charts, scatter graphs
Fractions, ratio, percentages
Adding subtracting, multiplying, dividing fractions
Trigonometry
Interior, exterior angles in polygons, Pythagoras theorem.

Graphs
Linear graphs, gradient, intercepts, distance time graphs, quadratic graphs
Area and volume
Area and perimeter, compound shapes, volume, calculations using pi, problem solving.

Transformations, construction
Plans and elevations, problem solving with bearings.
Equations and inequalities
Roots and quadratic functions.
Probability
Probability and outcomes, drawing and interpreting charts and tables.

Multiplicative reasoning
Growth and decay problems.
Similarity
Solving problems involving congruency.
Further statistics
Understanding random and stratified samples, stem and leaf, box plot diagrams.

Trigonometry
Upper and lower bounds, finding the sine and cosine and tangent of an angle, 2D, 3D problem solving
Equations and graphs
Solving simultaneous equation, inequalities, roots and cube root equations.



Prior learning

September
mocks

January mocks

Revision based
on analysis

GCSE Practice
papers 1,2,3

Future
learning

Year 11 LEARNING JOURNEY

GCSE Year 11 Foundation and Higher

1

2

3

4

5

6

September mocks
Review of all topics.

Review and revision of
topics based on mock
analysis.
Practice papers

January mocks
Review of topics and
revision based on
January
results.
Practice papers

Review of topics
Revision guided by
individual mock analysis
Practice papers

Practice papers
GCSE Exam Papers 1, 2, 3

Practice papers
GCSE Exam Papers 1, 2
and 3