

Mathematics KS4: Year 10 Sets 1 & 2



Rounding Estimating, Bounds

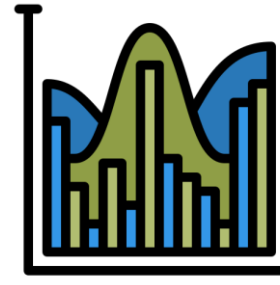
- Approximation to calculations
- Upper and Lower bounds
- Error Intervals
- Solve Problems

Congruence & Similarity

- Triangle
- Lengths
- Areas
- Volumes

Vectors

- Four operations on Vectors
- Vector proofs



Angles and Shapes

- Angle rules points, lines triangles, parallel lines
- Polygon angles
- Bearings

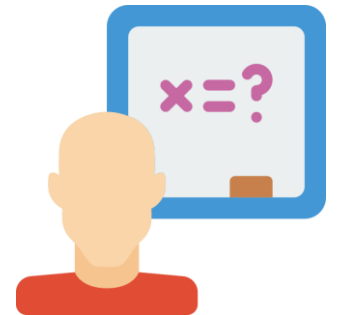
Circle Geometry

- All the Circle Theorems

Trigonometry 2

- SINE rule
- COSINE rule
- Area of triangle

SUMMER
3:2



Scale Drawing & Accurate Drawing

Drawings and 3D Shapes

Direct & Indirect Proportion

- Form and interpret Equations

SUMMER
3:1

Graphs 2

- cubic, reciprocal
- trigonometric
- Equations of Circle

Quadratic Equations

- Solve algebraically
- Complete the square
- Use Quadratic Formula

Inequalities & Graphs 1

- Plot linear graphs
- $y = mx + c$
- **Regions** On graph

SPRING
2:2

Real Life Graphs

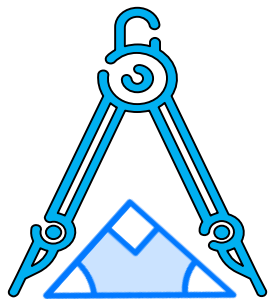
- Distance Time Graphs
- Speed Time Graphs

Constructions Loci

- Bisect a line, angle
- Perpendicular bisector

Probability

- Frequency Trees
- Expected Freq
- Mutually Exclusive
- Tree Diagrams
- Venn Diagrams



Surds

- Simplify
- Expand brackets
- Rationalise

Standard Form & Number

- LCM and HCF
- Convert
- St Form calculations

Indices

- Laws of
- Fractional
- Negative

SPRING
2:1

Formulae

- Substitute Formula
- Re-arrange

Factorise Quadratics

Linear Equations Inequalities

AUTUMN
1:2

Cumulative Frequency Box Plots Histograms

AUTUMN
1:1

Ratio and Proportion

- Multiplicative relationship - ratio and fraction
- Relate ratio to Linear functions
- Proportion as equality of ratios

Area/Perimeter & Circles

- Trapezia, Parallelogram
- Circle area, Circumference
- Sector areas, arc length

Volumes and Surface Area

- Prism, Pyramid
- Spheres, cones

Simultaneous Equations

- Algebraically
- Graphically

Algebraic Manipulation

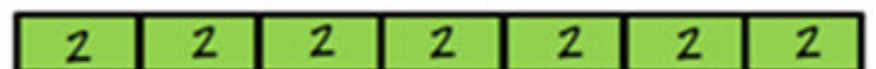
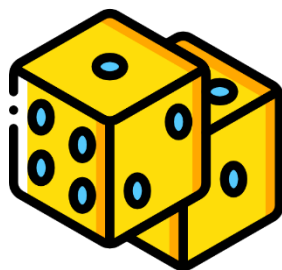
- Collect like terms
- Expand and factorise
- Expand double and triple brackets

Trigonometry

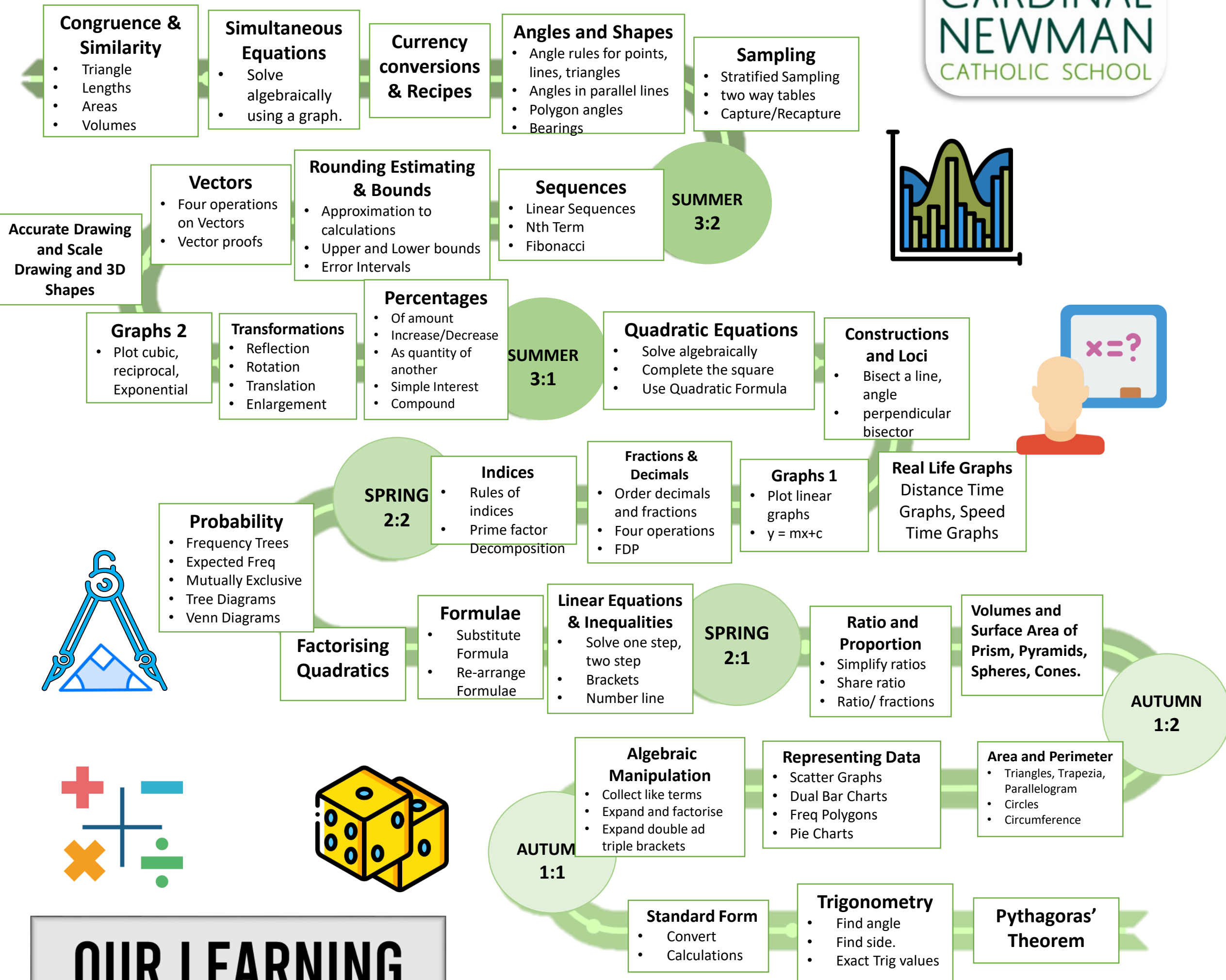
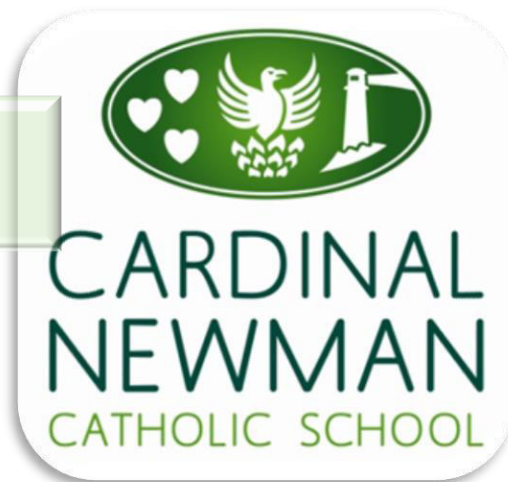
- Find angle
- Find side.
- Exact Trig values

Pythagoras' Theorem

OUR LEARNING
JOURNEY



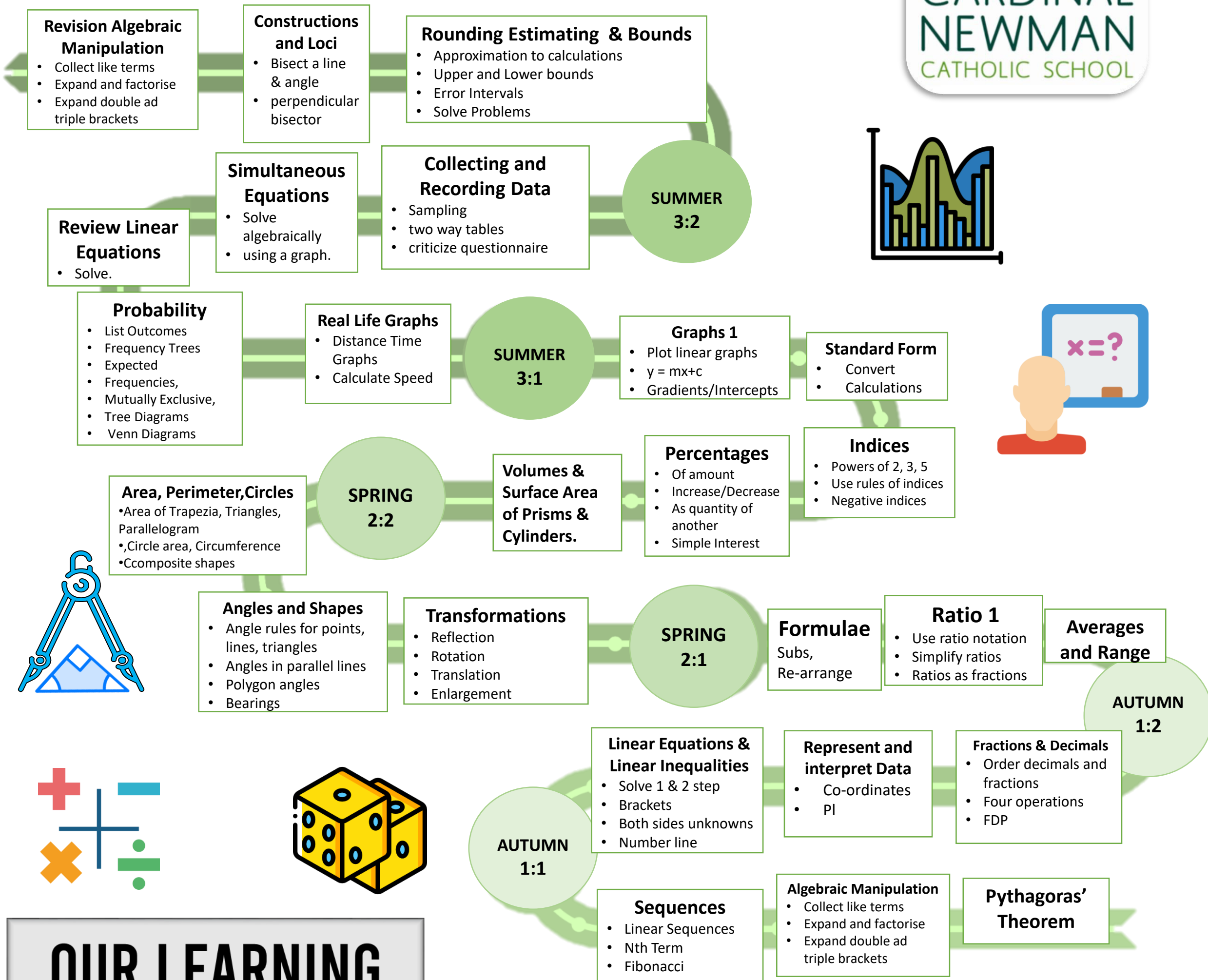
Mathematics KS4: Year 10 Set 3a,3b,4a



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Mathematics KS4: Year 10 Set a5, b4



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