LEARNING JOURNEY

English Martyrs' Catholic School

Ut omnes unum sint — May they all be one

End of Year 8 Maths

Beginning of Year 9 Maths (GCSE Course)

Statistics 2
Mean, Mode and Median from a frequency table.
Estimate the mean from a grouped frequency table.
Compare sets of data
Limitations of averages – the affect of outliers

Plans & Elevations
Construct/Interpret Plans & Elevations of 3D shapes
Draw nets of 3d shapes
Find surface area from a net
Faces, Edges & Vertices.

Synoptic test 5

Coordinates & Graphs
Y=mx +c
Find gradients & Intercepts
Midpoints
Calculate length of line given two points(pythag)
Plot linear & quadratic graphs

Algebra 2
Solve equations with unknowns on both sides i
Trial & Improvement
Check solutions by substitution
Rearrange formula
Equation/identity/expression

Synoptic test 4.

FDP 3
Add & Subtract mixed numbers
Solve problems with fractions
Simple algebraic fractions
Pre cancel fractions before multiplication/division

May half Term

Compound Measures
SDP
PFA
DMV

Easter

Transformations
Recap year 7 all 4 transformations.
Plans & Elevations
Column Vectors
Fractional enlargements **(ext)**

Statistics 1 cont..

Statistics 1
Continuous data
Grouped
Frequency tables
Scatter graphs & Correlations
Extrapolation
Pie charts & Two way tables

Area & Volume Cont..

Synoptic test 3

Area & Volume
Review of yr 7 area & Volume
Area & Circumference of a circle.
Area & perimeter of semi circles
Composite area
Volume of prisms

Probability
P(is not) = 1- P(is)
Mutually exclusive events
Sample space diagrams
Theoretical/Experimental Probability
Frequency trees

Feb Half term

FDP 2
Percentage change multipliers, increase and decrease.
Calculate percentage change.
Financial problems and Compound Interest

FDP:
Identify if a fraction is terminating.
Write decimals as a fraction
Write decimals as percentages
Know all equivalent FDP.

Sequences 1:
Generate sequences
Find the nth term rule of a positive and negative linear sequence
Use nth term to determine if a number is in a sequence.

Constructions
Construct SSS, ASA, SAS triangles
Construct more complex shapes
Perpendicular and angle bisector
Draw Loci

Measures
Measuring angles
Converting between units of mass, volume, time & money.

Ratio & Proportion
Equivalent ratios
Share in a ratio (2 part & 3 part)
Use unitary method for direct proportion
SDT DMV

Christmas

Geometry- Angles:
Angles in Parallel lines
Angles in polygons- sum of interior/exterior
Derive formula for sum of interior angles

Synoptic Test 2

Pythagoras
Find the long and short side of a right angled triangle.
Test if a triangle is right angled.

Oct Half Term

START

Synoptic Test 1

Algebra
Factorisation
Rearrange formula
Expand brackets
Powers- Negative

Calculating
4 Operations with Negative Numbers
Using a calculator

Number System 1
Prime factor decomposition
Lowest Common Multiple
Highest Common Factor
Venn Diagrams?
Divisibility tests

Y8 Maths | Number | Algebra | Shape Space & Measure | Data Handling | **Mr Hawkes**