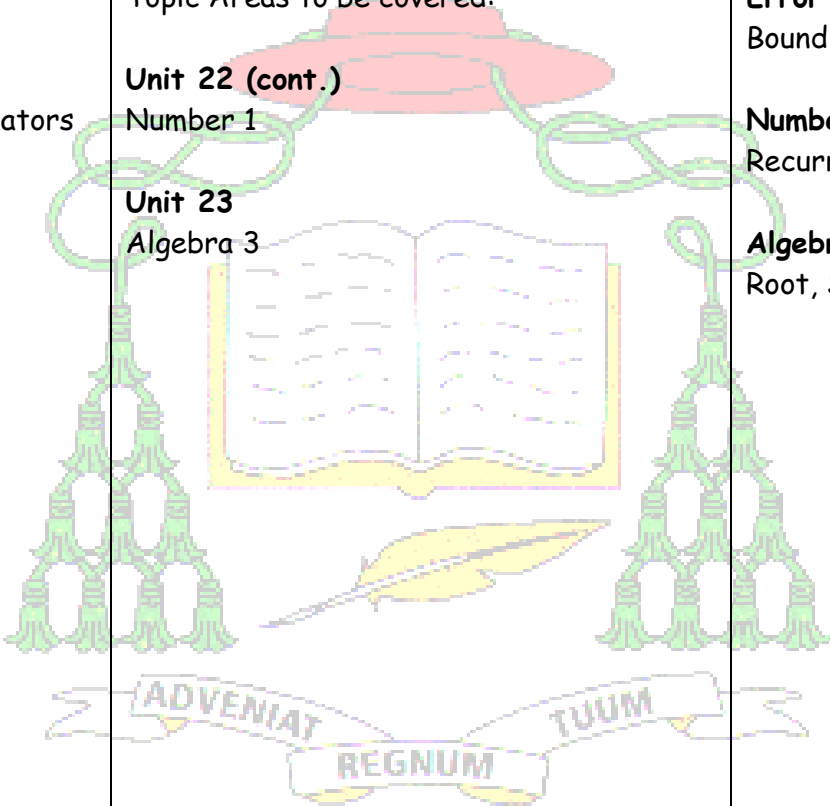


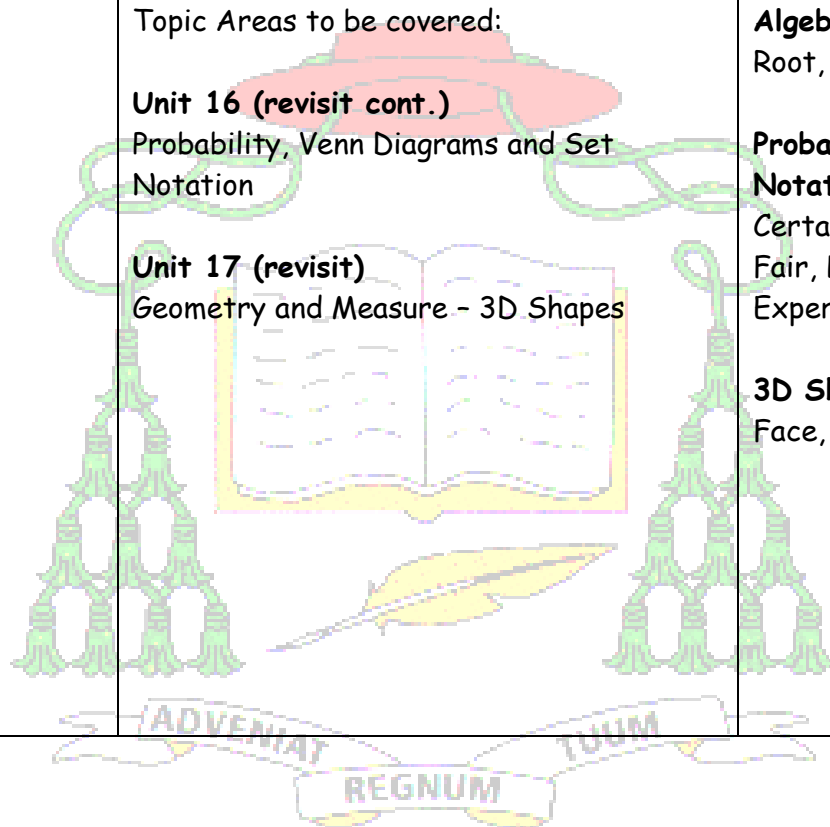
Archbishop Beck Catholic College Long Term Plan for **Maths**

Year 10

Autumn Half Term 1	Half Term 2	Key Vocabulary
<p>Topic Areas to be covered:</p> <p>Unit 18 Geometry and Measure 1</p>	<p>Topic Areas to be covered:</p> <p>Unit 19 Statistics 2</p> <p>Unit 20 Geometry and Measure - Transformations</p>	<p>Geometry and Measure 1 Theorem, Elevation, Depression, Construct, Bisect</p> <p>Statistics 2 Discrete, Continuous, Quantitative, Qualitative, Scatter</p> <p>Transformations Transformation, Transform, Object, Image</p>

Spring Half Term 3	Half Term 4	Key Vocabulary
<p>Topic Areas to be covered:</p> <p>Unit 21 Number - Error Intervals and Calculators</p> <p>Unit 22 Number 1</p>	<p>Topic Areas to be covered:</p> <p>Unit 22 (cont.) Number 1</p> <p>Unit 23 Algebra 3</p> 	<p>Error Intervals and Calculators Bound</p> <p>Number 1 Recurring and Reoccurring</p> <p>Algebra 3 Root, Subject</p>

Summer Half Term 5	Half Term 6	Key Vocabulary
<p>Topic Areas to be covered:</p> <p>Unit 23 (cont.) Algebra 3</p> <p>Unit 16 (revisit) Probability, Venn Diagrams and Set Notation</p>	<p>Topic Areas to be covered:</p> <p>Unit 16 (revisit cont.) Probability, Venn Diagrams and Set Notation</p> <p>Unit 17 (revisit) Geometry and Measure - 3D Shapes</p>	<p>Algebra 3 Root, Subject</p> <p>Probability, Venn Diagrams and Set Notation Certain, Likely, Evens, Unlikely, Impossible, Fair, Biased, Event, Outcome, Theoretical, Experimental, Relative, Systematically</p> <p>3D Shapes Face, Surface, Edge, Vertex and Vertices</p>

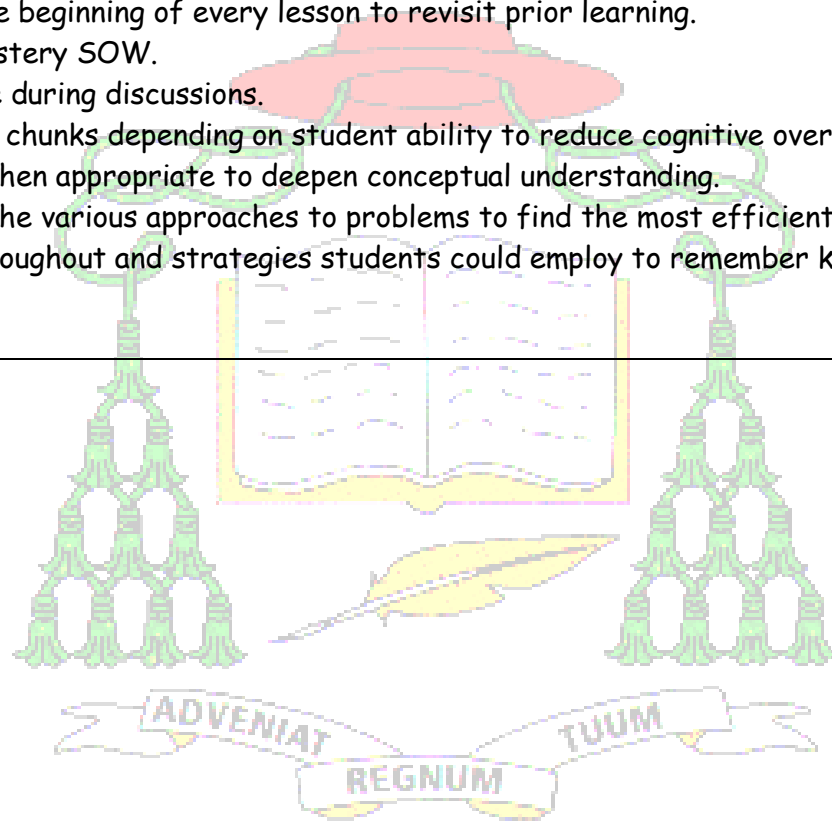


Year 10

Capital Cultural Experiences throughout the Academic Year	Learning Characteristics instilled in the curriculum	Career Opportunities
<p>World Pi Day. 14.03.2024 The history of Pi and competitions.</p> <p>Other mathematical opportunities for selected students include UK Maths Challenge approx. end of April. Also see if local universities can provide degree students to do workshops.</p>	<p>Confidence Use of consolidations and mini-whiteboards to revisit prior learning and allow students to feel open to making mistakes. Encourage discussion of mistakes and praise those who offer up incorrect solutions/alternative methods for discussion.</p> <p>Positive High expectations in presentation of exercise books and standard of weekly homework. Consistent use of praise. Texts home for exceptional standards.</p> <p>Respectful Learners greeted at the door on arrival and consolidation exercise ready to start upon arrival. Consistent expectations and standards with regards to behaviour. Lead students by example and expect that everybody treats one another as they would like to be treated.</p>	<p>Career Week. Date TBC</p>

Metacognition Methods applied in Teaching

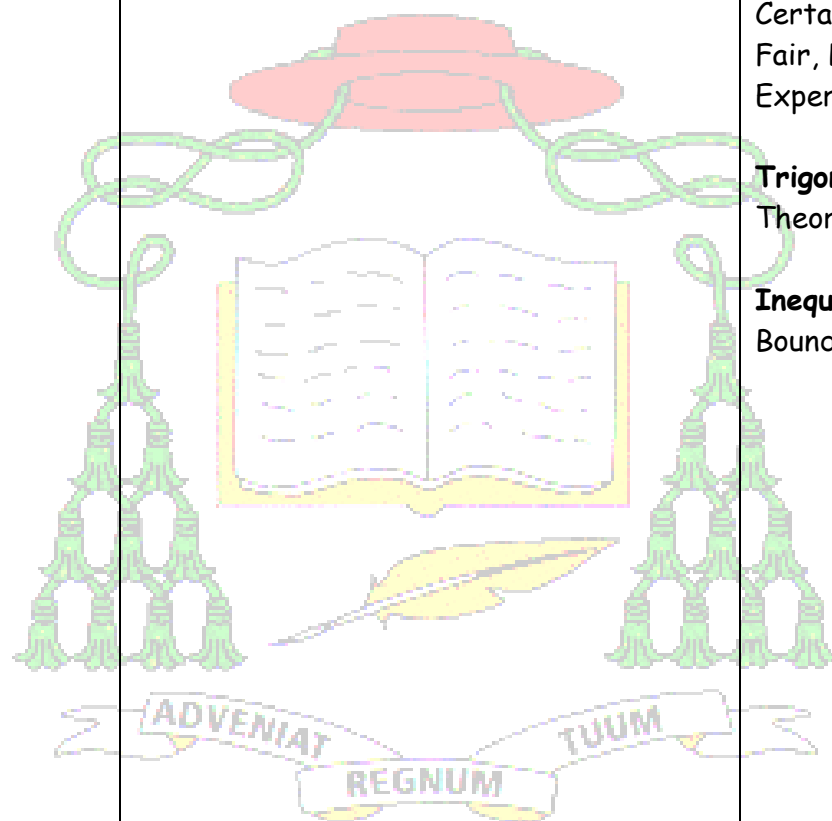
- Consolidation exercise at the beginning of every lesson to revisit prior learning.
- Use of a research based Mastery SOW.
- Give sufficient thinking time during discussions.
- Split topics into appropriate chunks depending on student ability to reduce cognitive overload.
- Use of variation exercises when appropriate to deepen conceptual understanding.
- Discussion of solutions and the various approaches to problems to find the most efficient method.
- Discussion of vocabulary throughout and strategies students could employ to remember key words.



Archbishop Beck Catholic College Long Term Plan for Maths

Year 11

Autumn Half Term 1	Half Term 2	Key Vocabulary
<p>Topic Areas to be covered:</p> <p>Unit 1 Algebra 1</p> <p>Unit 2 Algebra - Sequences</p> <p>Unit 3 Ratio, Proportion and Rates of Change 1</p> <p>Unit 4 Statistics</p>	<p>Topic Areas to be covered:</p> <p>Unit 5 Geometry and Measure 1</p> <p>Unit 6 Probability</p> <p>Unit 7 Geometry and Measure - Trigonometry, Arcs and Sectors</p> <p>Unit 8 Algebra - Inequalities and Error Intervals</p>	<p>Algebra 1 Expression, Equation, Formula, Term, Function, Identity, Sign, Variable, Unknown, Coefficient, Simplify, Solve, Index and Indices, Order, Power, Substitute, Manipulate, Simultaneous, Eliminate</p> <p>Sequences Arithmetic (as an adjective), Generate</p> <p>Ratio, Proportion and Rates of Change 1 To</p> <p>Statistics Discrete, Continuous, Quantitative, Qualitative, Construct, Interval</p> <p>Geometry and Measure 1 Sketch, Conventional, Points, Line, Curve, Regular, Irregular, Centre, O (for origin), Circumference, Radius, Diameter, Semi-circle, Arc, Chord, Major Segment, Minor Segment, Major Sector, Minor Sector, Tangent, Region</p>

**Probability**

Certain, Likely, Evens, Unlikely, Impossible, Fair, Biased, Event, Outcome, Theoretical, Experimental, Relative, Systematically

Trigonometry, Arcs and Sectors

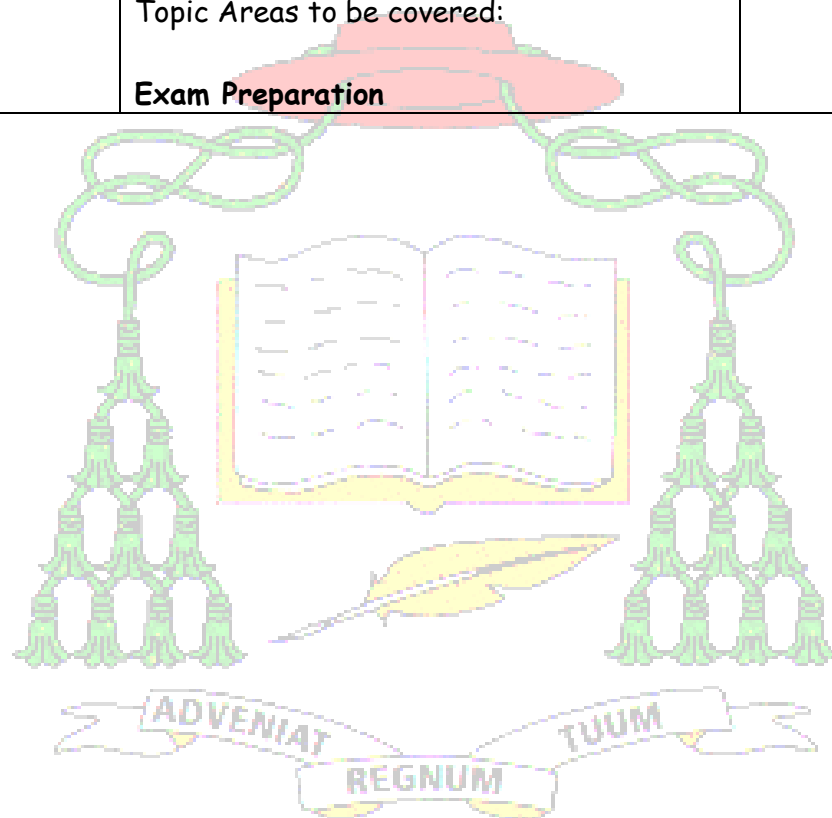
Theorem, Elevation, Depression

Inequalities and Error Intervals

Bound

Spring Half Term 3	Half Term 4	Key Vocabulary
<p>Topic Areas to be covered:</p> <p>Unit 9 Geometry and Measure - Surface Area and Volume</p> <p>Unit 10 Geometry and Measure 2</p> <p>Unit 11 Algebra - Coordinate Geometry and Advanced Graphs</p> <p>Unit 12 Ratio, Proportion and Rates of Change 2</p>	<p>Topic Areas to be covered:</p> <p>Unit 13 Number - Indices</p> <p>Unit 14 Transformations</p>	<p>Surface Area and Volume Face, Surface, Edge, Vertex and Vertices</p> <p>Geometry and Measure 2 Similar, Enlargement, Preserve</p> <p>Coordinate Geometry and Advanced Graphs Plot, Plane, Intercept, Gradient</p> <p>Indices Standard</p> <p>Transformations Transformation, Transform, Object, Image</p>

Summer Half Term 5	Half Term 6	Key Vocabulary
Topic Areas to be covered: Exam Preparation	Topic Areas to be covered: Exam Preparation	



Year 11

Capital Cultural Experiences throughout the Academic Year	Learning Characteristics instilled in the curriculum	Career Opportunities
<p>See if local universities can provide degree students to do workshops.</p>	<p>Confidence Use of consolidations and mini-whiteboards to revisit prior learning and allow students to feel open to making mistakes. Encourage discussion of mistakes and praise those who offer up incorrect solutions/alternative methods for discussion.</p> <p>Positive High expectations in presentation of exercise books and standard of weekly homework. Consistent use of praise. Texts home for exceptional standards.</p> <p>Respectful Learners greeted at the door on arrival and consolidation exercise ready to start upon arrival. Consistent expectations and standards with regards to behaviour. Lead students by example and expect that everybody treats one another as they would like to be treated.</p>	<p>Career Week. Date TBC</p>

Metacognition Methods applied in Teaching

- Consolidation exercise at the beginning of every lesson to revisit prior learning.
- Use of a research based Mastery SOW.
- Give sufficient thinking time during discussions.
- Split topics into appropriate chunks depending on student ability to reduce cognitive overload.
- Use of variation exercises when appropriate to deepen conceptual understanding.
- Discussion of solutions and the various approaches to problems to find the most efficient method.
- Discussion of vocabulary throughout and strategies students could employ to remember key words.

