8 Higher

Topics:

- SSM 2
 - Recognise similar shapes and calculate the scale factor from the ratio of two equivalent lengths
 - Calculate unknown lengths of sides of similar shapes (simple, disconnected shapes).
 - Identify congruent triangles using the conditions SSS, SAS, ASA, RHS
- SSM 3
 - Calculate the arc length the area of a sector (semi-circles and quadrants)
 - Calculate the area and perimeter of composite shapes involving circle sectors
 - Pythagoras Theorem calculate length of hypotenuse and the length of a side
- ALG 2
 - Find the nth term of more complex arithmetic sequences
 - Explain why a number does not appear in an arithmetic sequence (algebraic proof or otherwise)
 - Find the next term of a quadratic sequence
 - Derive an expression for the nth term of a quadratic sequence
 - Understanding of simple geometric and Fibonacci style sequences

Revision resources:

https://corbettmaths.com/contents/

8 Intermediate

Topics:

- NUM 5
 - $\circ~$ Find LCM and HCF of two or more numbers by listing
 - Prime factor decomposition of a number
 - Express a number as a product of prime factors using index notation
 - Find HCF and LCM using prime factors (e.g. Venn diagram / looking at powers)
- SSM 2
 - Solve problems based on shape properties (e.g. Missing angles, missing lengths)
 - \circ Lines of symmetry
 - Recognise and calculate order of rotational symmetry
 - Understand that congruent shapes have the same lengths and angles
- SSM 3
 - $\circ~$ Use the formula for calculating area of triangle
 - Calculate the perimeter and area of compound shapes
 - Calculate the area of Parallelograms and Trapeziums
 - Circumference and area of circles (no composite shapes)
- ALG 2
 - Generate a sequence from an nth term expression
 - Calculate a specific term in a sequence using an nth term expression
 - Find the nth term of more complex arithmetic sequences

Revision resources:

https://corbettmaths.com/contents/

8 Foundation

Topics:

- HD 1
 - Find the mode, mean, median and range for any set of discrete data
 - $\circ~$ Compare two distributions using the range and one average
- NUM 5
 - o Prime number
 - Find LCM of two or more numbers by listing (including Problem solving e.g. train times)
 - $\circ~$ Find HCF of two or more numbers by listing
 - Sorting numbers into Venn diagrams (multiples / primes etc.)
- SSM 2
 - Classify and define special triangles and quadrilaterals based on angle properties, line properties
 - Symmetry and order of rotational symmetry
- NUM 6
 - Changing fractions to decimals and vice versa
 - Convert between fractions, decimals, percentages

Revision resources:

https://corbettmaths.com/contents/