	Sparx Codes	
Numerical Skills	Understand and use place value for decimals. Calculations with negative numbers. Estimate calculations by rounding.	M763, M704, M522, M527, M135, M111, M431, M878
Order of operations	Solve calculations requiring understanding of B-I-DM-AS (know that the inverse of squaring is 'square rooting')	M521
Introduction to Algebra	Introduce the concept of algebra, simplify expressions, manipulate expressions through simple one step rearranging, substitute positive and negative integers into expressions, solve siimple one step equations. Substitute and solve.	M106, M830, M813, M795, M531, M417, M327, M208, M979
Primes, Factors and Multiples	Use the concepts and vocabulary of prime numbers, factors (or divisors), multiples, common factors, common multiples, highest common factor, lowest common multiple	M227, M823, M698, M322, M829
Expanding and Factorising 1	Simplify and manipulate algebraic expressions to maintain equivalence by multiplying a single term over a bracket or by taking out common factors	M288, M237, M792, M100
Addition and Subtraction	Use Addition and Subtraction, including formal written methods, applied to integers, decimals	M928, M429, M347, M152, M899
Perimeter	Calculate and solve problems involving perimeters of rectangles and compound shapes (not circles). Converting metric units of length.	M920, M635, M690
Mean	Describe, interpret and compare observed distributions of a single variable through the use of the mean	M940
Multiplication and Division	Use Multiplication and Division, including formal written methods, applied to integers, decimals	M113, M911, M187, M803, M462, M354, M873, M262
Area of triangles and quadrilaterals	Derive and apply formulae to calculate and solve problems involving area of triangles and quadrilaterals. Converting metric units of area.	M900, M390, M291, M610, M269, M996
Fraction Manipulation	Express one quantity as a fraction of another, where the fraction is less than 1 and greater than 1	M158, M410, M671, M939, M601
Adding and Subtracting Fractions	Use addition and subtraction, including formal written methods, applied to proper and improper fractions, and mixed numbers	M835, M931
Comparing and Ordering Fractions	Compare and order fractions by creating common denominators	M335, M958
Fractions of amounts	Interpret fractions as operators	M695

Polygons	Derive, describe, and illustrate properties of triangles, quadrilaterals and other plane figures. Describe, sketch, and draw regular polygons, and other polygons that are reflectively and rotationally symmetric example, equal lengths and angles] using appropriate language and technologies	M276, M523
Angles	Apply the properties of angles at a point, angles at a point on a straight line, vertically opposite angles	M502, M541, M780, M331, M818, M351, M679, M319
Coordinates	Read and plot coordinates in all 4 quadrants. Coordinates and developing algebraic relationships. Find midpoints. Understand how coordinates link to basic graphs of y=a, x=a, y=x and y=-x	M618

## Questions for my teacher and topics I would like to revise more

Year	Sparx	
Powers and Roots	Use integer powers and associated real roots (square, cube and higher), recognise powers of 2, 3, 4, 5 and distinguish between exact representations of roots and their decimal approximations	M135, M608
Prime Factorisation	Use the concepts and vocabulary of prime numbers, factors (or divisors), common factors, prime factorisation, including using product notation and the unique factorisation property (HCF and LCM with large numbers taught in 9.04)	M322, M823, M108, M365, M227, M698
Rounding	Round numbers and measures to an appropriate degree of accuracy [for example, to a number of decimal places or significant figures]	M111, M431, M994, M131, M878
Fractions	Multiply and divide fractions and mixed numbers	M939, M410, M671, M601, M835, M931, M157, M197, M110, M265
Solving Equations 1	Use algebraic methods to solve linear equations in one variable (including all forms that require rearrangement). Model situations or procedures by translating them into algebraic expressions or formulae and by using graphs	M707, M509, M387, M554, M813, M795, M531, M957
Coordinates and basic graphs	Coordinates and developing algebraic relationships	M618, M622, M797
Units of measurement	Use standard units of mass, length, time, money, and other measures, including with decimal quantities	M892, M627, M515, M772, M530, M761, M728
Angles in parallel lines	Understand and use the relationship between parallel lines and alternate and corresponding angles	M818, M163, M606, M351, M679, M393
Circumference	Calculate and solve problems involving perimeters of 2-D shapes (including circles) and composite shapes	M595, M169
Direct Proportion	Understand that a multiplicative relationship between two quantities can be expressed as a ratio or a fraction	M478, M681
Fractions, decimals, and percentages	Converting between fractions, decimals, and percentages.	M267, M958, M264, M553

Percentage Calculations	Solve problems involving percentage change (calc and non calc), including: percentage increase, decrease, original value problems and simple interest in financial mathematics. Using multipliers. Writing numbers as percentages of other numbers.	M235
Ratio 1	Divide a given quantity into two parts in a given part:part or part:whole ratio; express the division of a quantity into two parts as a ratio	M885, M543, M267, U921, M801, M525
Area of circles and trapezia	Derive and apply formulae to calculate and solve problems involving area of circles (including part circles) and trapezia	M705, M231, M430, M303, M269, M996
Statistics 1 (presenting and interpreting data)	Construct and interpret appropriate tables, charts, and diagrams, including frequency tables, bar charts, pie charts, vertical line (or bar) charts and stem and leaf for ungrouped and grouped numerical data	M945, M460, M738, M140, M183, M574, M165, M648, M210
Averages and Spread	Describe, interpret and compare observed distributions of a single variable through appropriate measures of central tendency (mean, mode, median) and spread (range, consideration of outliers).	M940, M934, M328, M841, M440

## Questions for my teacher and topics I would like to revise more