

## Number

	Topics	Clip Number	R	A	G
Arithmetic	Four rules with integers	18 – 23, 144, 145, 146			
	Money calculations	743 – 756			
	Priority of operations	24, 44, 120			
	Inverse operations	3, 6, 177			
Whole number theory	Understand number definitions and terms	25			
	Prime numbers	28			
	Factors, multiples and LCM	27, 29 – 36			
	Sequence rule to find a term	196, 197, 198			
Calculations with integers	Arithmetic with positive and negative numbers	39 – 43			
	Division of a quantity	22, 49, 50, 145, 146			
	Calculations with decimals	47 – 51, 135, 136			
Fractions	Fraction, decimals and percentages	52, 55, 73 – 76, 82, 83, 149			
	Fraction of a quantity	77, 84, 85, 86			
	Fraction arithmetic	65 – 70, 72			
Percentages	Percentage conversions	55, 75, 82, 83			
	Percentages of quantities	87			
	Percentage change	90, 91, 92, 94, 95, 97, 98			
	Reverse percentages	96			
Powers and roots	Powers of integers	99 – 103			
Ordering fractions, decimals and percentages	Listing in order	46, 60			
Calculator	Use of calculator	129			
Standard form	Standard form notation	122, 123, 124			
	Standard form calculations	125, 126, 127			
Approximation and estimation	Rounding	17, 56, 130, 133			
	Upper and lower bounds	137, 138			

**Continued on the next page**

## Ratio, proportion, and rates of change

	Topics	Clip Number	R	A	G
Calculations with ratio	Write in a ratio	328			
	Simplify ratio	329, 331			
	Share into a ratio	332 – 335			
	Use a ratio	335 – 338			
	Interpreting ratio	328, 330			
	Calculate with proportions	330			
Direct and inverse proportion	Direct proportion	339, 340, 341, 343, 344, 345, 348, 739 – 742			
	Inverse proportion	342, 346, 347, 348			
Growth and decay	Simple interest	93			
	Growth and decay problems and graphs	94, 95, 898			

## Algebra

	Topics	Clip Number	R	A	G
Algebraic expressions	Factorising expressions including quadratic expressions	168 – 171, 223, 224			
	Simplifying algebraic expressions	156 – 159, 173, 174			
	Multiplying out brackets and simplify	160 – 165			
	Simplify algebraic products and quotients	158, 159, 173, 174			
	Formulate algebraic expressions	151, 152, 153			
Algebraic formulae	Substitute into an expression	780 – 785			
Algebraic equations	Equations and identities	154			
	Solve linear equations	177 – 186, 188, 189			
	Solve quadratic equations	230, 234			
	Solve simultaneous equations	190 – 195			
	Rearrange equations	280 – 287			
Sequences	Continue sequence	196, 197, 198, 249, 250, 261, 263, 264			
Inequalities	Solving inequalities	269 – 272			
Language of functions	Function machines	176, 177			
Graphs	Equation of a straight line	205 – 214			
	Quadratic graphs	251 – 255			
	Graphs of real-world contexts	712, 713, 874 – 880, 894 – 902			

## Geometry and measures

	Topics	Clip Number	R	A	G
Conventions, notation and terms	Symmetry	827, 828			
	Circle terms	592			
	Polygons	822			
Ruler and compass constructions	Construct and interpret angle bisector, line bisector and distance from a point	660 – 663, 674			
Angles	Properties of parallel lines	481 – 483			
Properties of polygons	Quadrilaterals	824, 825, 826			
3-dimensional solids	Properties of solids	829, 830			
Similarity	Transformations	637 – 645, 648 – 654, 656, 657			
Vectors	Column vectors	623 – 626			
Units of measurement	Time, Money, Mass, Volume, Density	695 – 699, 702 – 711, 725 – 729, 743			
Compound units	Rates	738			
Map and scale diagrams	Bearings	492 – 496			
Perimeter calculations	Perimeters of triangles and quadrilaterals	549 – 552			
Area calculations	Area of a rectangle	554			
	Area of a triangle	557			
	Area of a circle	539 – 543			
	Area of composite shapes	555, 558			
Volume and surface area calculations	Volume and surface area including cuboid, prism, cylinder, pyramid and sphere	567 – 582			
Triangle mensuration	Trigonometry	508 – 515			
	Exact trigonometric ratios	845			

## Probability

	Topics	Clip Number	R	A	G
Basic probability and experiments	Understand the probability scale	349, 350			
	Probability of equally likely events	351 – 354			
	Relative frequency	356, 357			
	Probability calculation	351, 352			
Combined events and probability diagrams	Listing outcomes and related probabilities	670, 358, 359			
	Tree diagram	361, 362, 363			
	Calculation with the laws of probability	353 – 357, 360			

## Statistics

	Topics	Clip Number	R	A	G
Analysing data	Averages and range	404 – 410, 413 – 417, 419, 420			
	Scatter diagram and correlation	453, 454			
	Graphical misrepresentation	425, 426, 429, 450 – 454			
Interpreting and representing data	Bar chart and pie chart	425, 427 – 429			
	Frequency tree	368, 369			