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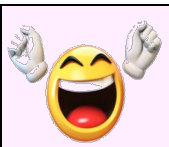
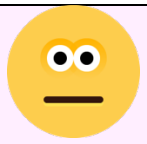
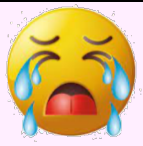
Easier topics

Harder topics

Year 9 Topics


Number Basics (the majority of this is revision from years 7 and 8)				
Recap of BIDMAS/BODMAS				
Recap of rounding (to decimal places and significant figures)				
Recap of estimation				
Scale drawings				
Recap of conversions, units and exchange rates				
Prime factor trees				
HCF/LCM (including with word problems)				
Word problems – functional skills				
Recap pf percentages (5 types) • An amount as a percentage of another amount • Finding percentages of an amount • Increasing/decreasing by a percentage • Percentage change (gain/loss) • Reverse percentages				
Recap of adding, subtracting, multiplying and dividing fractions				
Recap of fractions, decimals and percentages conversions				
Recap of multiplying by 10, 100, 1000 etc				
Recap of adding, subtracting, multiplying and dividing decimals				
Changing recurring decimals to fractions				
Standard form				
Ratio • Sharing when given one part • Sharing when given the total • Expressing a ratio as a fraction or percent				
Speed, distance and time				
Bounds and intervals				
Surds (usually only cover the basics of addition/subtraction and multiplication)				
Algebra				
Number substitution				
Collecting like terms				
Expanding single and double brackets				
Solving basic linear equations				
Solving linear equations with variables on both sides				
Forming linear equations (based on words and diagrams)				
Solving linear inequalities				
Indices (multiplying and dividing)				
Indices (fractional and negative powers) - sometimes not done until year 10				
Re-arranging formulae				
Factorising – common factors				
Factorising – product sum - sometimes not done until year 10				
Simultaneous equations				
Angles				
Sums of angles in triangles and quadrilaterals				
Vertical angles and angles at a point				
Parallel line rules (alternate interior, corresponding and co-interior/same side)				
Polygons (working out interior angles, exterior angles and number of sides)				
Perimeter, Area and Volume				
Basic perimeter and area of familiar single 2D shapes • Square • Rectangle • Triangle • Parallelogram • Trapezium • Kite • Circle (circumference and area)				
Perimeter and area of 2D compound shapes				
Surface area of 3D shapes (including nets)				
Volume of 3D shapes				
Graphing				
Drawing straight line graphs with tables				
Slope/gradient				
Parallel lines				
y intercepts				
x intercepts				
Drawing a straight line without a table				
Finding the equation of a straight line (between 2 points and parallel lines)				
Shading inequality regions				

Types of Graphs				
Conversion graphs				
Speed distance time graphs				
Trigonometry				
Bearings – basics with measuring				
Pythagoras				
Bearings – using parallel line laws				
SOHCAHTOA				
Bearings – using SOHCAHTOA - sometimes not done until year 10				
Basic Probability				
Understanding the probabilities of impossible, even chance and certain				
Finding a probability of a single event $\frac{number\ of\ successes}{total}$				
Finding the probability of one event occurring after another				
Data				
Mean and median calculations with ungrouped data				
Mean and median calculations with grouped data				
Bar Graph				
Pictogram				
Scatter graph				
Pie Chart				
Cumulative frequency				
Shapes				
Reflections				
Translations				
Enlargements				
Rotations				
Sequences				
Finding the next term by recognising a pattern				
Finding the nth term (linear and quadaratic sequences)				