## Year 11 Maths Revision Checklist

## In February PPE (May also have been in last PPE) <br> In last PPE

## Number

| Topic | Topic code | R | A | G |
| :---: | :---: | :---: | :---: | :---: |
| Calculating with roots and fractional indices | U851, U985, U772, U299 |  |  |  |
| Converting recurring decimals to fractions | U689 |  |  |  |
| Surds | U338, U663, U872, U499 |  |  |  |
| Rationalising the denominator | U707, U281 |  |  |  |
| Error intervals | U657, U301, U587 |  |  |  |
| Ordering positive integers | U600 |  |  |  |
| Ordering decimals | U435 |  |  |  |
| Ordering negative numbers | U947 |  |  |  |
| Adding and subtracting positive integers | U417 |  |  |  |
| Multiplying and dividing positive integers | U127, U453 |  |  |  |
| Adding and subtracting negative numbers | U742 |  |  |  |
| Multiplying and dividing negative numbers | U548 |  |  |  |
| Adding and subtracting decimals | U478 |  |  |  |
| Multiplying and dividing with place value | U735 |  |  |  |
| Multiplying and dividing with decimals | U293, U868 |  |  |  |
| Order of operations | U976 |  |  |  |
| Prime numbers, prime factorisation | U236, U739 |  |  |  |
| Factors, multiples, HCF and LCM | U211, U751, U529 |  |  |  |
| Powers and roots | U851 |  |  |  |
| Using standard form | U330, U534 |  |  |  |
| Calculating with standard form | U264, U290, U161 |  |  |  |
| Equivalent fractions and simplifying fractions | U704, U646 |  |  |  |
| Mixed numbers and improper fractions | U692 |  |  |  |
| Ordering fractions | U746 |  |  |  |
| Addition and subtraction of fractions | U736, U793 |  |  |  |
| Multiplication and division of fractions | U475, U544 |  |  |  |
| Converting and ordering fractions, decimals and percentages | U888, U594 |  |  |  |
| Fractions of amounts | U881, U916 |  |  |  |
| Percentages of amounts | U554, U349 |  |  |  |
| Percentage change | U773, U671 |  |  |  |
| Reverse percentages | U286, U278 |  |  |  |
| Simple interest | U533 |  |  |  |
| Rounding | U480, U298 |  |  |  |
| Rounding to significant figures | U731, U965 |  |  |  |
| Estimating answers | U225 |  |  |  |
| Value for money | M681 |  |  |  |

Algebra

| Topic | Topic code | R | A | G |
| :---: | :---: | :---: | :---: | :---: |
| Expanding triple brackets | U606 |  |  |  |
| Changing the subject | U556 |  |  |  |
| Operations with algebraic fractions | U685, U457, U824 |  |  |  |
| Factorising quadratic expressions: $\mathrm{ax}^{2}+\mathrm{bx}+\mathrm{c}$ | U858 |  |  |  |
| Simplifying algebraic fractions | U294 |  |  |  |
| Factorising to solve quadratic equations | U228, U960 |  |  |  |
| Using the quadratic formula | U665 |  |  |  |
| Completing the square to solve quadratics | U397, U589 |  |  |  |
| Quadratic equations in context | U150 |  |  |  |
| Quadratic simultaneous equations | U547 |  |  |  |
| Index laws | U235, U694, U662 |  |  |  |
| Equations of straight-line graphs ( $\mathrm{y}=\mathrm{mx}+\mathrm{c}$ ) | U315, U669 |  |  |  |
| Parallel lines | U377 |  |  |  |
| Perpendicular lines | U898 |  |  |  |
| Quadratic graphs | U989, U667 |  |  |  |
| Linear equations | U755, U325, U870, U505, U599 |  |  |  |
| Quadratic graphs: Turning points | U769 |  |  |  |
| Quadratic simultaneous equations on graphs | U875 |  |  |  |
| Exponential graphs | U229 |  |  |  |
| Exponential growth and decay problems | U988 |  |  |  |
| Trigonometric graphs | U450 |  |  |  |
| Graph transformations | U598, U487, U455 |  |  |  |
| Velocity-time graphs | U937, U562, U611 |  |  |  |
| Rate of change graphs | U638, U652, U862 |  |  |  |
| Estimating gradient from a curve | U800 |  |  |  |
| Estimating area under a curve | U882 |  |  |  |
| Equation of a circles and tangents | U567 |  |  |  |
| Linear inequalities as graph regions | U747 |  |  |  |
| Quadratic inequalities | U133 |  |  |  |
| Functions | U637, U895, U448, U996 |  |  |  |
| Linear sequences | U213, U530, U498, U978 |  |  |  |
| Recurrence relations | U171 |  |  |  |
| Quadratic sequences | U206 |  |  |  |
| Iteration and numerical methods | U434, U168 |  |  |  |
| Algebraic proof | U582 |  |  |  |

Geometry

| Topic | Topic code | R | A | G |
| :---: | :---: | :---: | :---: | :---: |
| Congruence proofs | U866, U887 |  |  |  |
| Enlargements | U134 |  |  |  |
| Describe combined transformations | U766 |  |  |  |
| Circle theorems: Angles inside a circle | U459, U251 |  |  |  |
| Circle theorems: Tangents and chords | U489, U130 |  |  |  |
| Circle theorems problems | U808 |  |  |  |
| Prove circle theorems | U807 |  |  |  |
| Volume of frustums | U350 |  |  |  |
| Volume: Problem solving | U543, U426 |  |  |  |
| Similar Shapes: Area and volume | U630, U110 |  |  |  |
| Pythagoras' Theorem in 2D and 3D | U385, U541 |  |  |  |
| Right-angled trigonometry: Problem solving | U319, U283, U545, U967 |  |  |  |
| 3D trigonometry | U170 |  |  |  |
| The area rule (1/2absinC) | U592 |  |  |  |
| Sine rule | U952 |  |  |  |
| Cosine rule | U591 |  |  |  |
| Trigonometry and bearings | U164 |  |  |  |
| Exact trigonometric values | U319 |  |  |  |
| Vectors problems | U781, U560 |  |  |  |
| Properties of 2D shapes | U121, U849 |  |  |  |
| Properties of 3D shapes | U719 |  |  |  |
| Nets of 3D shapes | U761 |  |  |  |
| Angles: Measuring, Drawing and Estimating | U447 |  |  |  |
| Combining angle facts | U655 |  |  |  |
| Angles in a quadrilateral | U732, U329 |  |  |  |
| Angles in polygons | U427 |  |  |  |
| Bearings | U525, U107 |  |  |  |
| Translations | U196 |  |  |  |
| Reflections | U799 |  |  |  |
| Enlargements | U519 |  |  |  |
| Rotations | U696 |  |  |  |
| Area of triangles, parallelograms and trapeziums | U945, U575, U424, U265, U343 |  |  |  |
| Circles | U767 |  |  |  |
| Circumference | U604, U221 |  |  |  |
| Circle area | U950, U373 |  |  |  |
| Surface area | U929, U259, U871 |  |  |  |
| Volume of cuboids | U786 |  |  |  |
| Volume of prisms and cylinders | U174, U915 |  |  |  |
| Similar shapes | U551, U578 |  |  |  |
| Scale diagrams | U257 |  |  |  |

## Probability

| Topic | Topic code | R | A |
| :--- | :---: | :---: | :---: |
| G |  |  |  |
| Probability scale | U803 |  |  |
| Probability of single events | U408, U510, U683 |  |  |
| Experimental probability | U580 |  |  |
| Expected outcomes | U166 |  |  |
| Listing elements in a set | U748, U296 |  |  |
| Frequency trees | U280 |  |  |
| Sample space diagrams | U104 |  |  |
| Tree diagrams | U558, U729 |  |  |
| Product rule for counting | U369 |  |  |
| Conditional probability | U246, U821, U806 |  |  |
| Probability from Venn diagrams | U476, U748, U699 |  |  |

## Statistics

| Topic | Topic code | R | A | G |
| :---: | :---: | :---: | :---: | :---: |
| Collecting data, frequency tables | U322, U120 |  |  |  |
| Two-way tables | U981 |  |  |  |
| Bar charts | U363, U557 |  |  |  |
| Pictograms | U506 |  |  |  |
| Pie charts | U508, U172 |  |  |  |
| Stem and leaf diagrams | U200, U909 |  |  |  |
| Choosing averages | U717 |  |  |  |
| Scatter graphs | U199, U277, U128 |  |  |  |
| Averages | U877, U717 |  |  |  |
| Cumulative frequency diagrams | U182, U642 |  |  |  |
| Box plots | U879, U837, U507 |  |  |  |
| Frequency polygons | U840 |  |  |  |
| Histograms | U814, U983, U267 |  |  |  |
| Capture-recapture | U328 |  |  |  |

## Ratio and proportion

| Topic | Topic code | R | A | G |
| :--- | :---: | :---: | :---: | :---: |
| Algebraic direct and inverse proportion | U407, U138 |  |  |  |
| Distance-time graphs | U403, U914, U462, U966 |  |  |  |
| Compound units: Density problem solving | U910 |  |  |  |
| Simplifying ratios | U687 |  |  |  |
| Sharing amounts in a ratio | U753, U577 |  |  |  |
| Converting between ratios, fractions and percentages | U176 |  |  |  |
| Inverse proportion scaling method | U357, U364 |  |  |  |
| Proportion graphs | U238 |  |  |  |
| Units of measure: Length, Mass and Capacity | U102, U388 |  |  |  |
| Conversion graphs | U652, U638, U862 |  |  |  |
| Compound units: Speed | U151 |  |  |  |

