Foundation Maths Revision List and Sparx Codes

| Strand | Substrand | Topic | Sparx Independent Learning Code | \odot | \odot |
|--------|------------------|---|---------------------------------|---------|---------|
| Number | Place value | Using number lines | U922 | | |
| Number | Place value | Understanding and ordering integers | U600 | | |
| Number | Place value | Understanding and ordering decimals | U435 | | |
| Number | Operations | Adding and subtracting integers | U417 | | |
| Number | Operations | Adding and subtracting decimals | U478 | | |
| Number | Operations | Multiplying and dividing with place value | U735 | | |
| Number | Operations | Formal multiply integers | U127 | | |
| Number | Operations | Formal multiply decimals | U293 | | |
| Number | Operations | Using a written method to divide integers | U453 | | |
| Number | Operations | Formal divide with decimals | U868 | | |
| Number | Negative numbers | Ordering negative numbers | U947 | | |
| Number | Negative numbers | Adding and subtracting negative numbers | U742 | | |
| Number | Negative numbers | Multiplying and dividing negative numbers | U548 | | |
| Number | Roots and powers | Calculating with roots and powers | U851 | | |
| Number | Operations | Using the correct order of operations | U976 | | |
| Number | Number skills | Using a calculator | U926 | | |
| Number | Index rules | Index rules with positive indices | U235 | | |
| Number | Index rules | Index rules with negative indices | U694 | | |
| Number | Standard form | Using standard form with positive indices | U330 | | |
| Number | Standard form | Using standard form with negative indices | U534 | | |
| Number | Standard form | Multiplying and dividing standard form | U264 | | |
| Number | Standard form | Adding and subtracting standard form | U290 | | |
| Number | Standard form | Standard form with a calculator | U161 | | |
| Number | Rounding | Rounding integers | U480 | | |
| Number | Rounding | Rounding decimals | U298 | | |
| Number | Rounding | Rounding integers using significant figures | U731 | | |
| Number | Rounding | Rounding decimals using significant figures | U965 | | |
| Number | Rounding | Estimating calculations | U225 | | |
| Number | Rounding | Finding error intervals | U657 | | |
| Number | Rounding | Truncating decimals | U108 | | |
| Number | Rounding | Error intervals for truncated numbers | U301 | | |
| Number | Fractions | Finding fractions of shapes | U679 | | |
| Number | Fractions | Constructing fractions | U163 | | |
| Number | Fractions | Finding equivalent fractions | U704 | | |
| Number | Fractions | Simplifying fractions | U646 | | |

| Number | Fractions | Ordering fractions | U746 |
|--------------|---------------------|--|------|
| Number | Fractions | Adding and subtracting fractions | U736 |
| Number | Fractions | Converting mixed numbers/improper fractions | U692 |
| Number | Fractions | Adding and subtracting mixed numbers | U793 |
| Number | Fractions | Ordering fractions and mixed numbers | U439 |
| Number | Fractions | Multiplying fractions | U475 |
| Number | Fractions | Multiplying with mixed numbers | U224 |
| Number | Fractions | Dividing fractions | U544 |
| Number | Fractions | Dividing with mixed numbers | U538 |
| Number | Fractions | Problem solving: Fractions and mixed numbers | U874 |
| Number | FDP | Converting between FDP | U888 |
| Number | FDP | Ordering fractions, decimals and percentages | U594 |
| Number | FDP | Writing numbers as % of other numbers | U925 |
| Number | FDP | Finding fractions of amounts non-calc | U881 |
| Number | FDP | Finding fractions of amounts with a calculator | U916 |
| Number | FDP | Finding percentages of amounts non-calc | U554 |
| Number | FDP | Finding percentages of amounts calc | U349 |
| Number | Percentage change | Percentage change without a calculator | U773 |
| Number | Percentage change | Percentage change with a calculator | U671 |
| Number | Percentage change | Finding original values | U286 |
| Number | Percentage change | Percentage an amount has been changed | U278 |
| Number | Percentage change | Simple interest calculations | U533 |
| Number | Percentage change | Compound interest calculations | U332 |
| Number | Percentage change | Growth and decay | U988 |
| Number | Types of number | Finding factors and using divisibility tests | U211 |
| Number | Types of number | Finding the lowest common multiple (LCM) | U751 |
| Number | Types of number | Finding the highest common factor (HCF) | U529 |
| Number | Types of number | Finding prime numbers | U236 |
| Number | Types of number | Prime factor decomposition | U739 |
| Number | Types of number | Finding the HCF and LCM using prime factors | U250 |
| Algebra | Algebraic notation | Using algebraic notation | U613 |
| Algebra | Substitution | Substituting into expressions | U201 |
| Algebra | Substitution | Substituting into algebraic formulae | U585 |
| Algebra | Substitution | Substituting into real-life formulae | U144 |
| Algebra | Simplifying | Simplifying expressions by collecting like terms | U105 |
| Algebra | Simplifying | Simplifying expressions using index laws | U662 |
| Algebra | Brackets | Expanding single brackets | U179 |
| Algebra | Brackets | Expanding double brackets | U768 |
| Algebra | Brackets | Factorising into one bracket | U365 |
| Algebra | Brackets | Factorising quadratic expressions | U178 |
| Algebra | Brackets | Factorising quadratic expressions Factorising the difference of two squares | U963 |
| Algebra | Algebraic fractions | Simplifying algebraic fractions | U103 |
| Algebra | Formulae | Changing the subjects of formulae | U556 |
| - | | | U755 |
| Algebra | Solving equations | Solving equations with two or more stone | |
| Algebra | Solving equations | Solving equations with two or more steps | U325 |
| Algebra | Solving equations | Solving equations: unknown on both sides | U870 |
| Algebra | Solving equations | Solving equations:unknown in denominator | U505 |
| Algebra | Solving equations | Constructing and solving equations | U599 |
| Algebra | Inequalities | Inequalities on number lines | U509 |
| Algebra | Inequalities | Solving single inequalities | U759 |

| Algebra | Inequalities | Solving double inequalities | U145 |
|---------|----------------------------|--|------|
| Algebra | Inequalities | Constructing and solving inequalities | U337 |
| Algebra | Quadratic equations | Factorising to solve quadratic equations | U228 |
| Algebra | Quadratic equations | Solving quadratic equations graphically | U601 |
| Algebra | Simultaneous equations | Solving simultaneous equation | U760 |
| Algebra | Simultaneous equations | Simultaneous equations graphically | U836 |
| Algebra | Simultaneous equations | Constructing linear simultaneous equations | U137 |
| Algebra | Sequences | Term-to-term rules | U213 |
| Algebra | Sequences | Substituting into position-to-term rules | U530 |
| Algebra | Sequences | Position-to-term arithmetic sequences | U498 |
| Algebra | Sequences | Position-to-term rules for patterns | U978 |
| Algebra | Sequences | Special sequences | U680 |
| Algebra | Sequences | Position-to-term geometric sequences | U958 |
| Algebra | Functions | Substituting into functions | U637 |
| Algebra | Graphs and coordinates | Reading and plotting coordinates | U789 |
| Algebra | Graphs and coordinates | Calculating midpoints | U933 |
| Algebra | Graphs and coordinates | Solving shape problems involving coordinates | U889 |
| Algebra | Graphs and coordinates | Plotting straight line graphs | U741 |
| Algebra | Graphs and coordinates | Finding equations of straight line graphs | U315 |
| Algebra | Graphs and coordinates | Interpreting equations of straight line graphs | U669 |
| Algebra | Graphs and coordinates | Finding the equation of a straight line | U477 |
| Algebra | Graphs and coordinates | Finding the equation of a straight line 2 | U848 |
| Algebra | Graphs and coordinates | Equations of parallel lines | U377 |
| Algebra | Non-linear graphs | Plotting graphs of quadratic functions | U989 |
| Algebra | Non-linear graphs | Interpreting graphs of quadratic functions | U667 |
| Algebra | Non-linear graphs | Graphs of cubic functions | U980 |
| Algebra | Non-linear graphs | Graphs of reciprocal functions | U593 |
| Algebra | Real-life graphs | Plotting linear real-life graphs | U652 |
| Algebra | Real-life graphs | Using and interpreting linear real-life graphs | U638 |
| Algebra | Real-life graphs | Finding equations of linear real-life graphs | U862 |
| Algebra | Real-life graphs | Sketch graphs of water flows | U896 |
| Algebra | Motion-time graphs | Plotting distance-time graphs | U403 |
| Algebra | Motion-time graphs | Interpreting distance-time graphs | U914 |
| Algebra | Motion-time graphs | Calculating speed from distance-time graphs | U462 |
| Algebra | Motion-time graphs | Plotting distance-time graphs using speeds | U966 |
| Algebra | Motion-time graphs | Plotting velocity-time graphs | U937 |
| Ratio | Time | Reading, converting and calculating with time | U902 |
| Ratio | Measures | Estimating and measuring | U102 |
| Ratio | Measures | Converting units of length, mass and capacity | U388 |
| Ratio | Measures | Converting units of area | U248 |
| | | | U468 |
| Ratio | Measures | Converting units of volume Problem solving: length, area and volume | |
| Ratio | Measures | | U663 |
| Ratio | Measures Compound measures | Using appropriate units | U497 |
| Ratio | Compound measures | Calculating with speed | U151 |
| Ratio | Compound measures | Calculating with density | U256 |
| Ratio | Compound measures | Calculating with density | U910 |
| Ratio | Compound measures | Calculating with pressure | U527 |
| Ratio | Compound measures | Mixed problems: density and pressure | U842 |
| Ratio | Ratio | Writing and simplifying ratios | U687 |
| Ratio | Ratio | Usingt ratios to find unknown amounts | U753 |

| Ratio | Ratio | Sharing amounts in a given ratio | U577 |
|----------|-------------------------|--|------|
| Ratio | Ratio | Combining ratios | U921 |
| Ratio | Ratio | Calculating with ratios and algebra | U676 |
| Ratio | Ratio | Changing ratios | U865 |
| Ratio | Proportion | Solving direct proportion word problems | U721 |
| Ratio | Proportion | Solving inverse proportion word problems | U357 |
| Ratio | Proportion | Currency conversion | U610 |
| Ratio | Proportion | Interpreting direct proportion equations | U640 |
| Ratio | Proportion | Interpreting inverse proportion equations | U364 |
| Ratio | Proportion | Graphs of direct and inverse proportion | U238 |
| Geometry | Area and perimeter | Mixed problems: Area and perimeter | U993 |
| Geometry | Area and perimeter | Finding the area of compound shapes | U970 |
| Geometry | Area and perimeter | Finding the perimeter of compound shapes | U351 |
| Geometry | Area and perimeter | Problem Solving | U226 |
| Geometry | Area and perimeter | Finding the area of triangles | U945 |
| Geometry | Area and perimeter | Area of compound shapes containing triangles | U575 |
| Geometry | Area and perimeter | Finding the area of parallelograms | U424 |
| Geometry | Area and perimeter | Finding the area of trapeziums | U265 |
| Geometry | Area and perimeter | Problem Solving 2 | U343 |
| Geometry | Shape properties | Line and shape properties | U121 |
| Geometry | Shape properties | Symmetry | U849 |
| Geometry | Shape properties | Properties of 3D shapes | U719 |
| Geometry | Angles | Understanding, measuring and drawing angles | U447 |
| Geometry | Angles | Angles on a line and about a point | U390 |
| Geometry | Angles | Vertically opposite angles | U730 |
| Geometry | Angles | Angles in triangles | U628 |
| Geometry | Angles | Angles in quadrilaterals | U732 |
| Geometry | Angles | Combining angle facts | U655 |
| Geometry | | Angles on parallel lines | U826 |
| Geometry | Angles | Using quadrilateral properties to find angles | U329 |
| Geometry | Angles | Angles in polygons | U427 |
| Geometry | Trigonometry | Understanding sin, cos and tan | U605 |
| Geometry | Trigonometry | Finding sides in right-angled triangles | U283 |
| Geometry | Trigonometry | Finding angles in right-angled triangles | U545 |
| Geometry | Trigonometry | Using the exact values of trigonometric ratios | U627 |
| Geometry | Trigonometry | Angles of elevation and depression | U967 |
| Geometry | Trigonometry | Calculating with trigonometry and bearings | U164 |
| Geometry | Similarity & congruence | Understanding congruence | U790 |
| Geometry | Similarity & congruence | Understanding similarity | U551 |
| Geometry | Similarity & congruence | Mixed problems: similarity and congruence | U112 |
| Geometry | Similarity & congruence | Congruent triangles | U866 |
| Geometry | Similarity & congruence | Finding unknown sides in similar shapes | U578 |
| | Circles | Identifying parts of circles | U767 |
| Geometry | | | |
| Geometry | Circles | Finding the circumference of circles | U604 |
| Geometry | Circles | Finding the area of circles | U950 |
| Geometry | Circles | Finding the arc length of sectors | U221 |
| Geometry | Circles | Finding the area of sectors | U373 |
| Geometry | Pythagoras' theorem | Using Pythagoras' theorem in 2D | U385 |
| Geometry | Plans and elevations | Nets of 3D shapes | U761 |
| Geometry | Plans and elevations | Plans and elevations Finding the surface area of cubes and cuboids | U743 |

| Geometry | Surface area | Finding the surface area of prisms | U259 |
|-------------|-------------------------|--|------|
| Geometry | Surface area | Finding the surface area of pyramids | U871 |
| Geometry | Surface area | Mixed Surface Area | U142 |
| Geometry | Surface area | Finding the surface area of cylinders | U464 |
| Geometry | Surface area | Finding the surface area of cones | U523 |
| Geometry | Surface area | Finding the surface area of spheres | U893 |
| Geometry | Surface area | Mixed Surface Area 2 | U771 |
| Geometry | Surface area | Finding the surface area of frustums | U334 |
| Geometry | Surface area | Finding the surface area of composite shapes | U561 |
| Geometry | Volume | Finding the volume of cubes and cuboids | U786 |
| Geometry | Volume | Finding the volume of prisms | U174 |
| Geometry | Volume | Finding the volume of pyramids | U484 |
| Geometry | Volume | Finding the volume of cylinders | U915 |
| Geometry | Volume | Finding the volume of cones | U116 |
| Geometry | Volume | Finding the volume of spheres | U617 |
| Geometry | Volume | Mixed problems: volume of cones & spheres | U426 |
| Geometry | Volume | Finding the volume of frustums | U350 |
| Geometry | Volume | Finding the volume of composite shapes | U543 |
| Geometry | Vectors | Understanding column vectors | U632 |
| Geometry | Vectors | Adding and subtracting column vectors | U903 |
| Geometry | Vectors | Multiplying column vectors by a scalar | U564 |
| Geometry | Vectors | Solving geometric problems using vectors | U781 |
| Geometry | Vectors | Identifying parallel vectors | U660 |
| Geometry | Transformations | Translation | U196 |
| Geometry | Transformations | Reflection | U799 |
| Geometry | Transformations | Rotation | U696 |
| Geometry | Transformations | Enlargement by a positive scale factor | U519 |
| Geometry | Transformations | Combining transformations | U766 |
| Geometry | Constructions and loci | Using a pair of compasses | U678 |
| Geometry | Constructions and loci | Constructing triangles | U187 |
| Geometry | Constructions and loci | Constructing bisectors of angles | U787 |
| Geometry | Constructions and loci | Constructing perpendicular bisectors | U245 |
| Geometry | Constructions and loci | Mixed: bisectors and perpendicular lines | U979 |
| Geometry | Constructions and loci | Constructing loci | U820 |
| Geometry | Scale diagrams | Drawing and interpreting scale diagrams | U257 |
| Geometry | Bearings | Measuring and drawing bearings | U525 |
| Geometry | Bearings | Calculating bearings | U107 |
| Geometry | Geometric proofs | Geometric proofs with angle facts | U471 |
| Geometry | Geometric proofs | Proofs with congruence and similarity | U887 |
| Probability | Theoretical probability | Using probability phrases | U803 |
| Probability | Theoretical probability | Writing probabilities as fractions | U408 |
| Probability | Theoretical probability | Writing probabilities as nactions Writing probabilities mixed | U510 |
| Probability | Theoretical probability | Probabilities of mutually exclusive events | U683 |
| Probability | Theoretical probability | Expected results from repeated experiments | U166 |
| Probability | Theoretical probability | Sample space diagrams | U104 |
| Probability | Theoretical probability | Venn diagrams | U476 |
| Probability | Theoretical probability | Venn diagrams with set notation | U748 |
| Probability | Theoretical probability | Using set notation | U296 |
| Probability | Theoretical probability | Frequency trees | U280 |
| Probability | Theoretical probability | Tree diagrams for independent events | U558 |
| Obublity | corected probability | The diagrams for macpenaetic events | 5555 |

| | Experimental | | |
|-------------|--------------------|---|------|
| Probability | probability | Calculating experimental probabilities | U580 |
| Statistics | Averages and range | Calculating the range | U526 |
| Statistics | Averages and range | Calculating the median | U456 |
| Statistics | Averages and range | Finding the mode | U260 |
| Statistics | Averages and range | Calculating the mean | U291 |
| Statistics | Averages and range | Finding averages from frequency tables | U569 |
| Statistics | Averages and range | Finding averages from diagrams | U854 |
| Statistics | Averages and range | Finding averages from grouped data | U877 |
| Statistics | Averages and range | Which average? | U717 |
| Statistics | Frequency tables | Interpreting tables | U981 |
| Statistics | Frequency tables | Interpreting tables with grouped data | U312 |
| Statistics | Charts | Drawing and interpreting tally charts | U653 |
| Statistics | Charts | Drawing and interpreting pictograms | U506 |
| Statistics | Bar charts | Drawing bar charts | U363 |
| Statistics | Bar charts | Interpreting bar charts | U557 |
| Statistics | Pie charts | Drawing pie charts | U508 |
| Statistics | Pie charts | Interpreting pie charts | U172 |
| Statistics | Line graphs | Drawing line graphs | U590 |
| Statistics | Line graphs | Interpreting line graphs | U193 |
| Statistics | Scatter graphs | Plotting scatter graphs | U199 |
| Statistics | Scatter graphs | Interpreting scatter graphs | U277 |
| Statistics | Scatter graphs | Using lines of best fit | U128 |
| Statistics | Frequency polygons | Drawing and interpreting frequency polygons | U840 |
| Statistics | Data | Types of data | U322 |
| Statistics | Data | Designing and using questionnaires | U911 |
| Statistics | Data | Collecting and recording data using tables | U120 |
| Statistics | Data | Presenting data and making conclusions | U571 |
| Statistics | Data | Comparing populations using diagrams | U520 |

Resources to support revision:

Sparx Maths is a website you are familiar with. Type the code of the topic into the independent search box and tasks are shown for you to complete. If you get stuck on a question, click 'watch video' & a video shows you how to complete the question.

www.sparxmaths.com

Corbett maths contains videos, worksheets and exam questions on every topic at GCSE. The link is below:

www.corbettmaths.co.uk

One website that has past exam papers and exam questions on all topics is Maths Genie. The link is below:

http://www.mathsgenie.co.uk