PPE1 Topic Lists for Revision

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| **Subject: Mathematics**  |
| **Topic or component: Non Calculator**  |
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|  Topic | Sparx Code | Revised?  |
| Divide algebraic fractions  | U824 |
| Adding and subtracting surds  | U872 |
| Calculate with speed | U151 |
| Expanding single brackets | U179 |
| Expanding single brackets | U179 |
| Finding prime numbers | U236 |
| Calculating the mean | U291 |
| Multiply decimals | U293 |
| Estimating roots and powers | U299 |
| Using the exact values of trigonometric ratios | U319 |
| Use standard form with positive indices | U330 |
| Simplify surds | U338 |
| Using the product rule for counting | U369 |
| Use Pythagoras' theorem in 2D | U385 |
| Angles on a line and about a point | U390 |
| Completing the square | U397 |
| Calculating Median | U456 |
| Surface area of cylinders | U464 |
| Multiplying fractions  | U475 |
| Calculating Range | U526 |
| Use standard form with negative indices | U534 |
| Dividing fractions | U544 |
| Understanding similarity  | U551 |
| Share amounts in a given ratio | U577 |
| Graphs of reciprocal functions | U593 |
| Constructing and solving equations | U599 |
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| Find the circumference of circles | U604 |
| Multiplying and dividing surds | U633 |
| Substituting into functions | U637 |
| Add & subtract algebraic fractions | U685 |
| Writing and simplifying ratios | U687 |
| Converting recurring decimals to fractions | U689 |
| Converting between mixed numbers and improper fractions | U692 |
| Prime factor decomposition | U739 |
| Venn diagrams with set notation | U748 |
| Solving simultaneous equations using substitution | U757 |
| Solving single inequalities | U759 |
| Solving simultaneous equations using elimination | U760 |
| Angles on parallel lines | U826 |
| Congruent triangles | U866 |
| Divide with decimals | U868 |
| Find fractions of amounts without a calculator | U881 |
| Surface area of spheres | U893 |
| Equations of parallel and perpendicular lines | U898  |

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| CALCULATOR: Paper 2

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|  spheres, Write numbers as percentages of other numbers, Rates  | U617, U925, U256  |
| Finding original values in percentage calculations  | U286  |
| Special sequences  | U680  |
| Solving equations with one step  | U755  |
| Solving shape problems involving coordinates  | U889  |
| Compound interest calculations  | U332  |
| Reading, converting and calculating with time, Simplifying fractions, Rates  | U902, U646, U256  |
| Writing and simplifying ratios  | U687  |
| Writing and simplifying ratios  | U687  |
| Reciprocal  | U593  |
| Angles in polygons  | U427  |
| Angles in polygons  | U427  |
| Sample space diagrams  | U104  |
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| Expected results from repeated experiments  | U166  |
| Changing the subjects of formulae  | U556  |
| Substituting into iterative formulae  | U434  |
| Position-to-term rules for quadratic sequences  | U206  |
| Finding approximate solutions to equations using iteration  | U168  |
| Angles subtended at the centre or circumference of a circle  | U459  |
| Angles subtended at the centre or circumference of a circle  | U459  |
| Alternate segment theorem  | U130  |
| Translation  | U196  |
| Understanding similarity  | U551  |
| Equation from a gradient and a point, Interpreting equations of straight lines  | U477, U669  |
| Finding sides in right-angled triangles, Finding angles in right-angled triangles  | U283, U545  |
| Tree diagrams for dependent events, Tree diagrams for independent events  | U729, U558  |
| Finding bounds for calculations  | U587  |
| Adding and subtracting algebraic fractions  | U685  |
| Translating graphs  | U598  |
| Reflecting graphs  | U487  |
| Transforming graphs  | U455  |
| Numbers as percentages of other numbers, Grouped data Frequency tables  | U925, U312  |
| Interpreting frequency tables with grouped data  | U312  |
| Finding averages from grouped data  | U877  |
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| Expanding double brackets  | U768  |

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| **Strategies and Resources for Revision:** |
| Use SPARX independent learning codes from your topics list.  Corbett Maths, watch the videos to help you revise the content and attempt the questions to check you understand. The “textbook exercise” questions are more for fluency practice (checking you understand the skills and methods involved) and the “practice questions” are more like exam style questions. Link here: <https://corbettmaths.com/contents/> Youtube: Search the playlists on Miss T Haywood or Miss A Barnes for Earls specific topics modelling the moethods for questions <https://www.youtube.com/channel/UC_PUOo81tue62tvuOJIGbmg> <https://www.youtube.com/channel/UCDvcyOCqc9NBRiX487f-dGg> |