Dear Parents and Carers,
Find attached the revision lists for your son's end of year exams. I have included the clip numbers for Sparx Maths. Your son needs to go through each list and RAG rate the topics to help him identify the priority areas for his revision. If you have any questions, please email me at msegbafah@ernestbevin.london or contact your son's Maths teacher.
This revision list as a guide and is not an exhaustive list of every question on the test, but covers all of the key skills needed for the test. Your son should so the following below;
RAG each topic and start with his RED ones. Watch the videos and complete the quizzes.
Re-watch the video if necessary and complete a 'building block' to gain confidence.
Use link https://support.sparx.co.uk/docs/independent-learning to guide his Sparx independent revision.

| Strand | Topic | Sparx Code | RA $\mathbf{G}$ |
| :---: | :---: | :---: | :---: |
| Number | Index rules with positive and negative indices | U235, U694 |  |
|  | Using standard form operations including calculations with positive and negative indices | U330,U534,U264,U290,U161 |  |
|  | Estimation, Rounding integers and decimals using significant figures | U298,U731,U965 |  |
|  | Finding error intervals,Truncating decimals,Finding error intervals for truncated numbers | U225,U657,U108,U301 |  |
|  | Fractions and its applications | $\begin{aligned} & \text { U679,U163,U704,U646,U746,U736,U696,U439, } \\ & \text { U475,U544 } \end{aligned}$ |  |
|  | Fractions, decimals and percentages applications and operations | U874,U888,U594,U925,U881,U916,U554,U349,U773 , U671 |  |
|  | Finding the percentage an amount has been changed | U278 |  |
|  | Finding factors and using divisibility tests | U211 |  |
|  | Estimating roots and powers | U299 |  |
|  | Indices of the form \$ frac $^{\text {a }}$ (1\}\{a\}\$ | U985,U772 |  |
|  | Finding bounds for calculations | U587 |  |
|  | Converting fractions to recurring decimals and vice versa | U550,U689 |  |
|  | Operations on surds | U872,U633,U338 |  |
|  | Prime factor decomposition, Finding the lowest common multiple (LCM) and the highest common factor (HCF) | U751, U529, U236, U739,U250 |  |
| Algebra | Substituting into algebraic formulae and real-life formuale | U585, U144 |  |
|  | Simplifying expressions by collecting like terms | U105 |  |
|  | Simplifying expressions using index laws | U662 |  |
|  | Expanding single and double brackets | U179,U768 |  |
|  | Factorising into one bracket | U365 |  |
|  | Factorising quadratic expressions of the form $\$ x^{\wedge} 2+b x+c \$$ | U178 |  |
|  | Factorising the difference of two squares | U963 |  |
|  | Simplifying algebraic fractions by cancelling common factors | U103 |  |
|  | Changing the subjects of formulae | U556 |  |
|  | Solving equations of different types | U755,U325,U870,U505,U599 |  |
|  | Inequalities | U509,U759 |  |
|  | Constructing and solving simultaneous equations | U137 |  |
|  | Graphs of quadratic, cubic and reciprocal functions | u989,U667,U980,U593 |  |
|  | Plotting linear real-life graphs | U652 |  |


|  | Using and interpreting linear real-life graphs | U638 |  |
| :---: | :---: | :---: | :---: |
|  | Finding equations of linear real-life graphs | U862 |  |
|  | Reading, converting and calculating with time | U902 |  |
|  | Expanding brackets with surds | U499 |  |
|  | Rationalising denominators containing a single and two terms | U707,U281 |  |
|  | Expanding triple brackets,Completing the square | U606,U397 |  |
|  | Simplifying algebraic fractions by factorising into one and two brackets | U437,U294 |  |
|  | Operations on algebraic fractions | U685,U457, U824 |  |
|  | Factorising to solve quadratic equations of the form $\$ a x^{\wedge} 2+b x+c=0 \$$ | U960 |  |
|  | Solving quadratic equations using the quadratic formula and by completing the square | U665,U589 |  |
|  | Constructing and solving quadratic equations | U150 |  |
|  | Estimating areas under non-linear graphs | U882 |  |
|  | Equations of circles and tangents | U567 |  |
|  | Constructing direct and inverse proportion equations | U407,U138 |  |
| Ratio, | Converting units of length, mass and capacity | U388 |  |
| Proportio | Converting units of area and volume | U248, U468 |  |
| n ,Rates of | Problem solving: Converting units of length, area and volume | U663 |  |
| Change and | Converting between ratios, fractions and percentages | U176 |  |
| y | Mixed problems: Finding the area and perimeter of simple shapes | U993 |  |
|  | Finding the area of triangles, area of compound shapes containing triangles, parallelograms and trapeziums | U945,U970,U575,U424,U265 |  |
|  | Angles on a line ,about a point, in triangles, quadrilaterals and parallel lines | U390,U628,U732,U826 |  |
|  | Angles in polygons | U427 |  |
|  | Finding unknown angles in right-angled triangles | U545 |  |
|  | Angles of elevation and depression | U967 |  |
|  | Calculating with trigonometry and bearings | U164 |  |
|  | Mixed problems: Understanding similarity and congruence | U790, U112,U866 |  |
|  | Finding the area of circles, sectors | U950, U373 |  |
|  | Plans and elevations | U743 |  |
|  | Finding the surface area of cylinders,cones,spheres | U464,U523, U893 |  |
|  | Mixed problems: Finding the volume of cones and spheres | U426 |  |
|  | Understanding column vectors,Adding and subtracting column vectors, Multiplying column vectors by a scalar | U632,U903,U564 |  |
|  | Translation, Reflection | U196,U799.U766 |  |
|  | Constructing triangles, bisectors of angles | U187, U787 |  |
|  | Mixed problems: Loci, Constructing bisectors and perpendicular lines | U820, U245,U979 |  |
|  | Measuring and drawing bearings,Calculating bearings | U525,U107, U887 |  |
|  | Problem solving: Area and perimeter of rectangles and compound shapes (Higher) | U934 |  |
|  | Problem solving: Area of triangles, parallelograms and trapeziums (Higher) | U904 |  |
|  | The area rule | U592 |  |


|  | Finding the perimeter and area of similar shapes | U630 |  |
| :--- | :--- | :--- | :--- |
|  | Finding the surface area and volume of similar <br> shapes | U110 |  |
|  | Enlargement by a positive or negative scale factor | U134 |  |
|  | Writing probabilities as fractions, decimals and <br> percentages | U408,U510 |  |
|  | Presenting data and making conclusions | U571 |  |
|  | Conditional probabilities from tables and Venn <br> diagrams | U246,U699 |  |
|  | Using the conditional probability formula and <br> from tree diagrams | U821,U806 |  |

## Useful Websites

