Year 10 Maths Home learning Term 1 HIGHER

Sparx Maths is the platform we use for home learning. The goal is for every child, every week to do at least 1 hour of challenging but achievable mathematical practice outside of the classroom. This would enable children to raise their attainment and confidence in Maths. Sparx uses an algorithm to work out the level and type of questions to set each individual so they are just the right level to challenge but not too hard so that all questions can be completed.

SPARX Maths is set on a Wednesday and due the following Wednesday, for all students even if they don't have Maths that day. Every child can answer all of the questions in their compulsory homework by themselves. **SPARX** uses scaffolded pathways through topics which support learning unique to the individual. Every question has a support video to help answer questions they find challenging. Additional homework is available to students via XP Boost which is questions at a similar level to their compulsory home learning, target work to stretch students further and independent learning so they can look at any topic they chose and at any level of difficulty.

Homework Set	Topics	Homework Due
06 September	**Understanding and ordering integers** - U600 GCSE / Number / Place value **Understanding and ordering decimals** - U435 GCSE / Number / Place value **Finding factors and using divisibility tests** - U211 GCSE / Number / Factors, multiples and primes	13 September
13 September	**Using a calculator** - U926 GCSE / Number / Number skills **Using the correct order of operations** - U976 GCSE / Number / The order of operations **Finding the lowest common multiple (LCM)** - U751 GCSE / Number / Factors, multiples and primes	20 September
20 September	**Finding the highest common factor (HCF)** - U529 GCSE / Number / Factors, multiples and primes **Adding and subtracting mixed numbers** - U793 GCSE / Number / Fractions and mixed numbers **Multiplying with mixed numbers** - U224 GCSE / Number / Fractions and mixed numbers	27 September
27 September	**Interpreting scatter graphs** - U277 GCSE / Statistics / Scatter graphs **Using lines of best fit** - U128 GCSE / Statistics / Scatter graphs **Drawing stem-and-leaf diagrams** - U200 GCSE / Statistics / Stem-and-leaf diagrams	04 October
04 October	**Interpreting stem-and-leaf diagrams** - U909 GCSE / Statistics / Stem-and-leaf diagrams **Drawing and interpreting frequency polygons** - U840 GCSE / Statistics / Frequency polygons Special equipment **Comparing populations using diagrams** - U520 GCSE / Statistics / Collecting and presenting data	11 October
11 October	**Using algebraic notation** - U613 GCSE / Algebra / Algebraic notation	18 October

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	Substituting into real-life formulae - U144 GCSE / Algebra / Substituting into expressions and formulae **Substituting into algebraic formulae** - U585 GCSE / Algebra / Substituting into expressions and formulae	
18 October	**Term-to-term rules** - U213 GCSE / Algebra / Sequences **Position-to-term rules for sequences of patterns** - U978 GCSE / Algebra / Sequences **Position-to-term rules for quadratic sequences** - U206 GCSE / Algebra / Sequences	01 November
25 October	**Half Term**	
01 November	**Calculating with speed** - U151 GCSE / Ratio, Proportion and Rates of Change / Compound measures **Calculating with density** - U910 GCSE / Ratio, Proportion and Rates of Change / Compound measures **Calculating with pressure** - U527 GCSE / Ratio, Proportion and Rates of Change / Compound measures	08 November
08 November	**Angles on parallel lines** - U826 GCSE / Geometry / Angles **Combining angle facts** - U655 GCSE / Geometry / Angles **Using quadrilateral properties to find angles** - U329 GCSE / Geometry / Angles	15 November
15 November	**Understanding congruence** - U790 GCSE / Geometry / Similarity and congruence **Understanding similarity** - U551 GCSE / Geometry / Similarity and congruence **Mixed problems: Understanding similarity and congruence** - U112 GCSE / Geometry / Similarity and congruence **Finding unknown sides in similar shapes** - U578 GCSE / Geometry / Similarity and congruence	22 November
22 November	**Expanding double brackets** - U768 GCSE / Algebra / Brackets **Factorising into one bracket** - U365 GCSE / Algebra / Brackets **Factorising quadratic expressions of the form** x^2+bx+c - U178 GCSE / Algebra / Brackets	29 November
29 November	**Identifying parts of circles** - U767 GCSE / Geometry / Circles **Finding the circumference of circles** - U604 GCSE / Geometry / Circles **Finding the arc length of sectors** - U221 GCSE / Geometry / Circles **Venn diagrams with set notation** - U748 GCSE / Probability / Theoretical probability	06 December

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06 December	**Finding the perimeter of compound shapes** - U351 GCSE / Geometry / Area and perimeter **Problem solving: Area and perimeter of rectangles and compound shapes (Foundation)** - U226 GCSE / Geometry / Area and perimeter **Finding the area of triangles** - U945 GCSE / Geometry / Area and perimeter	13 December
13 December	**Finding the area of parallelograms** - U424 GCSE / Geometry / Area and perimeter **Problem solving: Area of triangles, parallelograms and trapeziums (Foundation)** - U343 GCSE / Geometry / Area and perimeter **Finding the volume of prisms** - U174 GCSE / Geometry / Volume	20 December
20 December	**Christmas Holidays**	