HUNTINGTON SCHOOL
MATHEMATICS DEPARTMENT

Mathematics: Mid Term Plan for Year 7

Term 1 Assessment: w/c 16/11. The core topics from half term 1 and 2 will be included

Term 2 Assessment: w/c 22/2. The core topics from half term 3 and 4 will be included

Term 3 Assessment: Between 24/5 – 18/6. The core topics from half term 1 to 5 will be included

Homework: Weekly homework will be set on a Wednesday, due the following Wednesday via Sparx Maths.

Able and interested: Extension work, and problem-solving task will be provided in lessons where needed.

Support and Extension: Some topics in the table below may not be taught at this current point. This will depend on the attainment of the individuals, and these topics will then be taught at a later date when more appropriate.

Building on: These topics will have been seen before and are needed to progress to the core topics

Core: These topics will be on the assessments

Extension: These topics show where the core topics lead. They may be covered in class if the core topics are secure.

Why this? Why Now? The national curriculum sets out the key maths skills and knowledge that all children in England should learn, and at Huntington School we make sure your child experiences this fully throughout their time with us. Our maths curriculum is planned in a sensible, step-by-step order so that each new topic builds on what pupils already know, helping them grow in confidence and understanding. The table below shows how the learning is sequenced and explains why topics are taught in this order, making it easier for you to see how your child's maths knowledge develops over time.

Half Term	1	2	3	4	5	6
Knowledge and skills which will be covered during this half term.	**Number:** Integer place Value, times tables, using number lines, ordering negative numbers, arithmetic. Arithmetic with negative numbers, order of operation, decimal place value, roots and powers. **Algebra:** Order of operations, arithmetic with	**Ratio and Proportion:** Multiplying by 10, 100 and 1000, using number lines. Converting units of time, using clocks, timetables and calendars, Measuring length mass and capacity **Geometry:** Line properties, shape properties. Finding perimeters of	**Number:** Times tables, division, finding factors, lowest common multiple, highest common factor, equivalent fractions, simplify fractions, convert between mixed numbers and improper fractions. Lowest common multiple, highest common factor, prime factor decomposition, finding	**Algebra:** Algebraic notation, simplifying expressions, highest common factor. Expanding single brackets, expanding single brackets and simplifying expressions, factorising into one bracket. Simplifying algebraic fractions by factorising, expanding double brackets.	**Statistics:** Place value, arithmetic, averages and range. Calculating the range, median, mode and mean. Interpreting frequency tables and two-way tables, tally charts, pictograms, bar charts, collecting and recording data. Averages from frequency tables, choosing suitable averages. Interpreting	**Probability:** Adding and subtracting fractions, converting between fractions, decimals and percentages, ordering fractions, decimals and percentages. Using probability phrases, writing probabilities as fractions, decimals and percentages. Probabilities of mutually exclusive

	negative numbers, function machines, algebraic notation, substitution. Simplify expressions, substitution into real-life formulae, solving equations. Solving equations with fractions, solving equations with unknowns on both sides, constructing and solving equations.	rectangles and compound shapes. Finding areas of rectangles, triangles, and compound shapes. Finding the area parallelograms and trapeziums. **Algebra:** Shape properties Reading and plotting coordinates. Solving shape problems involving coordinates. Calculating midpoints.	equivalent fractions, simplify fractions, order fractions, convert between mixed numbers and improper fractions, add and subtract fractions, add and subtract mixed numbers. Finding highest common factors and lowest common multiple using prime factor decomposition, simplifying algebraic fractions by cancelling common factors.	**Geometry:** Types of angles, solving equations with 1 or 2 steps. Types of angles, estimating and measuring angles, drawing angles. Angles on a line and about a point, vertically opposite angles, angles in triangles. Angles in quadrilaterals, combining angle facts.	frequency tables with grouped data. **Ratio and Proportion:** Using a calculator. Solving proportion problems **Number:** Simplify fractions, convert between mixed numbers and improper fractions, solving proportion problems, finding equivalent fractions, simplifying fractions, ordering fractions. Reciprocals, multiply fractions, divide fractions, multiply and divide with mixed numbers, fractions of amounts, converting between fractions, decimals and percentages, ordering fractions, decimals and percentages, writing numbers as percentages of other numbers. Using recurring decimal notation, converting fractions to recurring decimals.	events, sample space diagrams. **Number:** Converting between fractions, decimals and percentages, fractions of amounts. Finding percentages of amounts (with and without a calculator), percentage change (with and without a calculator). Finding original values in percentage calculations. **Ratio and proportion** Solving proportion problems, arithmetic with decimals. Value for money.

Building on KS2	**Number:** Place value, addition and subtraction **Algebra:** Terms and equations	**Number**: Multiplication and division with 10, 100 and 1000 **Geometry:** Perimeter and area, coordinates, converting units, volume	**Number:** Multiplication and division up to 4 digits, equivalent fractions. Add, subtract, multiply and divide with fractions, understanding decimals, rounding and percentages	**Geometry:** shape properties and angles	**Number:** Arithmetic with decimals, rounding decimals **Statistics:** Interpret charts and tables	**Number:** Arithmetic with decimals, rounding decimals
Key vocabulary	**Number** Rounding Place value Square Root Multiply (Product) Divide (Share) Addition (Sum/Total) Subtract (Less) **Algebra** Simplify Formula Terms Expressions	**Ratio and Proportion** Length Width Units Volume **Geometry** Area Metric Perimeter **Algebra** Coordinates Plot Midpoint Quadrant Axis	**Number** Fraction Numerator Denominator Tenths Hundredths Equivalent Quantity Prime	**Algebra** Expand Factor Factorise **Geometry** Angle Quadrilateral Acute Obtuse Estimate Exterior Interior	**Statistics** Average Mode Median Mean Range Interpret **Ratio and Proportion** Proportional Relationship **Number** Reciprocal Multiply (Product) Divide (Share) Addition (Sum/Total) Subtract (Less) Numerator Denominator	**Probability** Event Likelihood Experimental Scale **Number** Percentage Fraction Increase Decrease **Ratio and Proportion** Money Discount Offer