		Topic	Key Words	Links to previous learning	Links to wider curriculum	
AUTUMN 1	**Number 1**	Properties of Numbers Prime Factorisation HCF and LCM Rounding to DP, SF and Approximating	Prime, Prime Factor, Prime Factorisation, Product, Venn Diagram, HCF, LCM	Multiples, Factors, Primes, HCF and LCM, Rounding to 10, 100, 1000 and Decimal Places	Science – cell division PSD – personal identity Science – Distance of planets PE – training reps	**English - Mathematical Vocabulary**
	Calculations	Directed Number BIDMAS with Negatives Calculating Indices Standard Form	Standard Form, Significant Figures Negative Number, Directed Number, Improper Fraction, Top Heavy Fraction, Mixed Number, Operation, Inverse, Long Multiplication, Short Division, Power, Indices Roots	Multiplying and Dividing by Powers of 10, BIDMAS, Calculating by Addition, Subtraction, Division and Multiplication	PSD – Personal Budgeting Health and social care – Skills and qualifications PSD – managing a budget PSHE – qualifications needed	
AUTUMN 2	**Shape 1**	Constructions Scale Drawings Bearings Enlargements	Similar, Enlarge, Enlargement, Scaling, Scale Factor, Centre of Enlargement, Scale Drawing, Bearing, Plan, Elevation	Drawing and Measuring Angles, Direction, Scale Drawings	Technology – Accurate measuring Art – Enlargement of prep work Construction – application of skills	
	Probability 1	Basic Probability Calculating Probabilities Listing Outcomes Probability from Experiments And/Or Rule Tree Diagrams Sets And Venn Diagrams	Probability, Theoretical Probability, Event, Outcome, Impossible, Unlikely, Evens Chance, Likely, Certain, Equally Likely, Mutually Exclusive, Exhaustive, Possibility Space, Variable	Using Scales, Basic Probability, Knowledge of Powers and Roots, Negative Numbers	Science - Probability from Experiments	
	Algebra 1	Expand Factorise Indices	Term, Coefficient, Factor, factorise, Power, Indices, Formula, Formulae, Subject	Simplifying expressions, substitution, function machines	Science – equations, calculations, reactions	

		Topic	Key Words	Links to previous learning	Links to wider curriculum	
SPRING 1	**FDP 1**	Equivalent Fractions Improper Fractions/Mixed Numbers Convert between FDPs Order FDPs	Fraction, Mixed Number, Improper Fraction, Proper Fraction, Top Heavy Fraction, Percentage, Decimal, Terminating, Recurring, Simplify, Cancel	Equivalents between Fractions, Decimals and Percentages, Ordering whole numbers, negatives and Decimals		**English - Mathematical Vocabulary**
	Proportion 1	Ratio and Proportion Best Buys Speed, Distance and Time	Ratio, Proportion, Multiplier, Speed, Units, Compound Units	Simplify ratio, Divide a ratio into a given amount,	Home Cooking – reading recipes and meal planning	
	Sequences	Finding nth term Arithmetic sequences Linear sequences Fibonacci Quadratic Sequences	Sequence, Linear, Term, Difference, Term-to-Term Rule, Position-to-Term Rule, Pattern, Sequence, Linear, Term, Term-to-Term Rule, Ascending, Descending, Sequence, Linear, Term, Difference, Term-to-Term Rule, Position-to-Term Rule, Ascending, Descending, Term, nth term, Generate, Linear, Quadratic, First (second) Difference, Fibonacci Number, Fibonacci Sequence,	Term-to-Term Rule, Position-to-Term Rule,		
SPRING 2	**Angles**	Investigating Angles in Polygons Investigating Angles in Parallel Lines Problem Solving with Angles	Angles, Degrees, Right Angle, Acute, Obtuse, Reflex, Protractor, Vertically Opposite, Parallel, Alternate, Corresponding and Interior Angles, Exterior Angle, Regular Polygon	Basic Angle facts, Angles around a Point and on a Straight Line	Art – creating a personal response	
	FDP 2	Adding, subtracting, multiplying and dividing with fractions	Mixed Number, Equivalent Fraction, Simplify, Cancel, Lowest Terms, Proper Fraction, Improper Fraction, Top Heavy Fraction, Numerator, Denominator,	Common Denominators, Mixed Numbers and Improper Fractions,		
	FDP 3	Fraction of an Amount Percentage of an Amount Percentage Increase and Decrease Percentage Multipliers Reverse Percentages	Percent, Percentage, Multiplier, Increase, Decrease, Mixed Number, Simplify, Cancel, Lowest Term, Percent, Percentage, Percentage Change, Original Amount, Multiplier, Simple Interest, Exact	Calculating 10%, 5%, 25% and 50%,		

Oswaldtwistle School Foundation Tier Maths Long Term Plan

		Topic	Key Words	Links to previous learning	Links to wider curriculum	
SUMMER 1	**Algebra 2**	Function Machines Solving Equations Solving Inequalities	Algebra, Algebraic, Unknown, Equation, Operation, Solve, Solution, Brackets, Symbol, Substitute, Inequality	**Algebra 2** Solving Simple Equations, Collecting Like Terms, Expanding Brackets	-	**English - Mathematical Vocabulary**
	Shape 2	Area and Perimeter Area and Circumference (Circles) Volume of 3D Shapes Surface Area of 3D Shapes	Circle, centre, Radius, Diameter, Chord, Circumference, Pi, Prism, Cross Section, Cylinder, Polygon, Solid	Knowledge of formulae for area and perimeter for all 2D shapes, Units of measure, Names 2D and 3D shapes	PE – methods of measurement Construction – wood joints Travel and Tourism – graphs, charts and collecting data	
	Algebra 3	Linear Graphs Quadratic functions Distance time graphs Gradient Y-intercept	Coordinates, x-axis, y-axis, Origin, Quadrant, Plot, Function, Formula, Linear, Coordinate Plane, Gradient, y-intercept, Substitute, Quadratic, Model, Speed, Distance, Quadratic, Cubic, Reciprocal, Acceleration, Deceleration, Parabola, Asymptote, Rate of Change	Coordinates, Substitution	Science – Making Compounds	
SUMMER 2	**Statistics 1**	Frequency Tables Bar Charts Pie Charts Histograms Scatter Graphs	Relative Frequency Data, Categorical Data, Discrete Data, Continuous Data, Grouped Data, Frequency Table, Frequency, Histogram, Scale, Graph, Axis, Axes, Scatter Graph, Positive and Negative Correlation, Measure, Average, Spread, Consistency,	Knowledge of graphs, Tables and Charts, Read and Represent Data, Ordering Numbers, X and Y Axis	PSD – healthy living PE – Training for fitness Citizenship – Measuring data	
	Statistics 2	Mean, Median, Mode and Range Averages from a frequency table Estimated mean from frequency tables Comparing sets of data	Mean, Median, Mode, Range, Statistics, Approximate, Round, Calculate an Estimate, Grouped Frequency, Midpoint	Addition, division, frequency tables	English – Analysing text – use of statistics	