Year 6 Maths Autumn

Place Value

Numbers to 1,000,000	Numbers to 10,000,000
Read and write numbers to 10,000,000	Powers of 10
Compare and order any integers	Round any integer
Negative numbers	

Addition, Subtraction, Multiplication and Division

Add and subtract integers	Common factors and multiples
Rules of divisibility	Primes to 100
Square and cube numbers	Multiply up to a 4-digit number by a 2-digit number
Solve problems with multiplication	Short division
Division using factors	Long division with remainders

Addition, Subtraction, Multiplication and Division

Solve problems with division	Solve multi-step problems
Order of operations	Reason from known facts

Fractions

Equivalent fractions and simplifying	Compare and order fractions
Add and subtract any two fractions	Add and subtract mixed numbers
Multi-step problems	Multiply and divide fractions by integers and fractions
Fraction of an amount	Fraction of an amount-find the whole

Measurement – Converting Units

Metric measures	Converting metric measures
Miles and kilometres	Imperial measures

Spring

Ratio

Add or multiply?	Use ratio language	Introduction to the ratio symbol
Ratio and fraction	Scale drawing	Scale factors
Ratio and proportion problems	Recipes	

Algebra

1 and 2 - step function machines	Form expressions	Substitution
Formulae	Form equations	Solve 1 and 2-step equations
Find pairs of values	Solve problems with two unknowns	

Decimals

Place value within 1	Round decimals	Add and subtract decimals
Multiply and divide by 10, 100 and 1,000		
Multiply and divide decimals by integers		

Fractions, Decimals and Percentages

Decimal and fraction equivalents	Fractions as division	Understand percentages
Fractions to percentages	Equivalent fractions, decimals and percentages	
Order fractions, decimals and percentages		
Percentage of an amount – one step, then multi step	Percentages – missing values	

Area, perimeter and Volume

Shapes - same area	Area and perimeter	Area of a triangle – counting squares
Area of a right-angled triangle and then any triangle	Area of a parallelogram	
Volume - counting cubes	Volume of a cuboid	

Statistics

Line graphs	Dual bar charts	Read and interpret pie charts
Pie charts with percentages	Draw pie charts	

Summer

Shape

Measure and classify angles	Calculate angles	Vertically opposite angles
Angles in a triangle- special cases.	Angles in a triangle – missing angles	
Angles in quadrilaterals and polygons	Circles	
Draw shapes accurately	Nets of 3-D shapes	

Position and Direction

The first quadrant	Read and plot points in four quadrants	
Solve problems with coordinates	Translations	Reflections

Themed Projects, Consolidation and Problem Solving

White Rose Bakery Project

White Rose Tours Project

White Rose Futures Project