Featherstone Primary School
Core curriculum overview – Year 6

This year, your child has joined Year 6. At the end of this year, your child will sit their SATs (Standard Assessment Tests) which will assess their understanding of the curriculum taught throughout KS2.

Within this document, is a breakdown of the objectives which children could be assessed on within these assessments. These are a great starting place for you to support your child in their learning at home as well as reading with your child regularly, practising their Ice-Cool spellings and learning their multiplication and division facts.

Maths				
Strand	Year 3	Year 4	Year 5	Year 6
Number and place value	Count from 0 in multiples of 4,8,50 and 100.	Count in multiples of 6,7,9,25 and 1000.	Count forwards or backwards in steps of powers of 10 for any given number up to 1000000.	
	Compare, read, write and order numbers to 1000 in numerals and words.	Order and compare numbers beyond 1000.	Read, write, order and compare numbers to at least 1000000.	Read, write, order and compare numbers up to 10 000 000.
	Find 10 or 100 more or less than a given number.	Find 1000 more or less than a given number.		
	Recognise the place vale of each digit in a three-digit number.	Recognise the place value of each digit in a four-digit number.	Determine the value of each digit in numbers up to 1000000.	Determine the value of each digit in numbers up to 10000000.
		Read Roman numerals to 100.	Read Roman numerals to 1000 and recognise years.	
	Identify, represent and estimate numbers using different representations.	Identify, represent and estimate numbers using different representations.		
		Round any number to the nearest 10,100 or 1000.	Round any number up to 1000000 to the nearest 10, 100, 1000, 10000 and 100 000.	Round any whole number to a required degree of accuracy.
		Count backwards through zero to include negative numbers.	Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero.	

Addition, subtraction, multiplication and division.	Add and subtract numbers mentally including: A three-digit number and ones. A three-digit number and tens. A three-digit number and hundreds.		Add and subtract numbers mentally with increasingly large numbers.	
	Add and subtract numbers with up to three digits using the formal method of addition.	Add and subtract numbers up to 4 digits using the formal method of addition.	Add and subtract whole numbers with more than 4 digits using the formal method of addition.	
	Estimate the answer to a calculation and use the inverse operations to check answers.	Estimate and use inverse operations to check answers to a calculation.	Use rounding to check answers to calculations and determine levels of accuracy.	Use estimation to check answers to calculations and determine, in the context of the problem, an appropriate degree of accuracy.
	Sole problems, including missing numbers and more complex addition and subtraction.	Solve addition and subtraction two-step problems in context, deciding which methods to use and why.	Solve addition and subtraction multi-step problems in context, deciding which operations and methods.	
			Identify multiples and factors including finding factor pairs and common factors of two numbers.	Identify common factors, common multiples and prime numbers.
			Know and use the vocabulary of prime numbers, prime factors and composite numbers.	
			Know prime numbers to 19 and establish prime numbers to 100.	
			Recognise and use square numbers and cube numbers and use the correct notation.	
	Recall and use multiplication and division facts for the 3,4 and 8 multiplication tables.	Recall multiplication and division facts for tables up to 12 x 12.	Multiply and divide numbers mentally drawing upon known facts.	Perform mental calculation, including with mixed operations and large numbers.
		Multiply by 0. Multiply and divide y 1.	Multiply and divide whole numbers and decimals by 10 100 and 1000.	
		Recognise and use factor pairs.		
	Using the multiplications that they know to multiply a two-digit and one-digit number, progressing into	Multiply two-digit and three digit numbers by a one-digit number using the formal written method.	Multiply four-digit numbers by a one-digit number. And two two-digit numbers using the formal	Multiply four-digit and two-digit numbers using the formal method of long multiplication.

	a formal method.		method.	
			Divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context.	Divide numbers up to 4 digits by a two-digit numbers using the formal written method of long division and interpret remainders using fractions or by rounding.
	Solve missing number problems and correspondence problems.	Solve problems involving all calculations taught.	Solve problems using all calculations taught including factors, multiples, square and cube numbers	Solve problems using all calculations taught.
				Use knowledge of the order of operations to carry out calculations.
Fractions, decimals and percentages.	Recognise and use fractions as numbers, unit fractions and non-unit fractions with small denominators.			
	Recognise and show using diagrams equivalent fractions using small denominators.	Recognise and show using diagrams families of common equivalent fractions.	Recognise mixed numbers and improper fractions and convert from one to the other.	Use common factors to simplify fractions, use common multiples to express fractions in the same denomination.
			Identify, name and writ equivalent fractions of a given fraction, represented visually, including tenths and hundredths.	
	Compare and order unit fractions with the same denominators.		Compare and order fractions whose denominators are all multiples of the same number.	Compare and order fractions including fractions greater than 1.
	Add and subtract fractions with the same denominator within a whole.	Add and subtract fractions with the same denominator.	Add and subtract fractions with the same denominator and denominators that are multiples of the same number.	Add and subtract fractions with different denominators and mixed numbers using the concept of equivalent fractions.
			Multiply proper fractions and mixed numbers by whole numbers.	Multiply simple pairs of proper fractions writing the answer in its simplest form.
				Divide proper fractions by whole numbers.

Fractions, decimals and percentages.		Recognise and write decimal equivalents to ¼,/1/2, ¾.	Read and write decimal numbers as fractions.	Associate a fraction with division to calculate decimal equivalents.
		Recognise and write decimal equivalents of a number of tenths or hundredths.	Recognise and use thousandths and relate them to tenths and hundredths and decimal equivalents.	
		Round decimals with one decimal place to the nearest whole number.	Round decimals with two decimal places to the nearest whole number and one decimal place.	
		Compare numbers with the same number of decimal places up to two decimal places.	Read, write, order and compare numbers with up to three decimal places.	
		Find the effect of dividing a one-digit or a two-digit number by 10 and 100.		Identify the value of each digit to three decimal places and multiply and divide numbers by 10, 100 and 1000.
				Multiply one-digit numbers with up to two decimal places by whole numbers.
				Use written division methods in cases where the answer has up to two decimal places.
	Solve problems involving the above.			
			Recognise the percent symbol and understand that per cent relates to number of parts in 100. Write percentages as a fraction with denominator hundred and as a decimal.	Recall and use equivalences between simple fractions, decimals and percentages including in different contexts.
			Solve problems that require knowing percentage and decimal equivalents of fractions whose denominators are factors of 100.	

Ratio and proportion				Solve problems involving the calculation of percentages and the use of percentages for comparison.
				Solve problems involving similar shapes where the scale factor is known or can be found.
				Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples.
Algebra				Express missing numbers algebraically.
				Use simple formulae.
				Generate and describe linear number sequences.
				Find pairs of numbers that satisfy an equation with two unknowns.
				Enumerate possibilities of two variables.
Measurement	Compare lengths (m/cm/mm)	Compare different measures including money in pounds and pence.		
	Compare mass (kg/g) Compare volume/capacity (l/ml)			
	Measure lengths (m/cm/mm) Measure mass (kg/g) Measure volume/capacity (l/ml)	Estimate different measures including money in pound and pence.		
	Tell and write the time from an analogue clock and 12-hour clocks.	Read, write and convert time between analogue and digital 12-hour clocks.		
	Tell and write the time from an analogue clock and 24 hour clocks.	Read, write and convert between analogue and digital 24-hour clocks.		

Measurement	Tell and write the time from a clock using Roman numerals.	Solve problems involving converting from hours to minutes, minutes to seconds, years to months and weeks todays.	Solve problems involving converting between units of time.	
	Estimate and read time with increasing accuracy to the nearest minutes using all time vocabulary.			
	Know the number of seconds in a minutes, days in each months, year and leap year.			
	Compare durations of events.			
		Convert between different units of measure (e.g. km to m, hour to minutes)	Convert between all metric measurements.	Use, read, write and convert between standard units using decimal notation up to three decimal places.
			Understand and use approximate equivalences between metric units and common imperial units.	Covert between miles and kilometres.
	Measure the perimeter of simple 2D shapes.	Measure and calculate the perimeter of a rectilinear figure.	Measure and calculate the perimeter of composite rectilinear shapes.	Recognise that shapes with the same area can have different perimeters.
		Find the area of rectilinear shapes by counting squares.	Calculate and compare the areas of triangles and estimate the area of irregular shapes.	Calculate the area of parallelograms and triangles. Recognise when it is possible to use the formulae for the area of shapes.
			Estimate volume and capacity.	Calculate, estimate and compare volume of cubes and cuboids. Recognise when it is possible to use the formulae for volume of shapes.
	Add and subtract money to give change. Add and subtract lengths, mass and volume.	Calculate different measures, including pounds and pence.	Use all four operations to solve problems involving measures, using decimal notation.	Solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places.

Geometry –properties of shapes.	Identify horizontal, vertical lines and pairs of perpendicular and parallel lines.	Compare and classify geometric shapes including quadrilaterals and triangles based on their properties and sizes.	Use the properties of rectangles to deduce related facts and find missing lengths and angles.	Compare and classify geometric shapes based on their properties and sizes.
		Identify lines of symmetry in 2D shapes presented in different orientations.	Distinguish between regular and irregular polygons based on reasoning about equal sides and angles.	Describe simple 3D shapes.
		Complete a simple symmetric figure with respect to a specific line of symmetry.		
	Draw 2D shapes.			Draw 2D shapes using given dimensions and angles.
	Make 3D shapes using modelling materials.		Identify 3D shapes including cubes and cuboids from 2D representations	Recognise and build simple 3D shapes including making nets.
	Recognise that angles are a property of a shape or a description of a turn.	Identify acute and obtuse anlges and compare and order angles up to two right angles by size.	Know angles are measured in degrees, estimate and compare acute, obtuse and reflex angles.	Find unknown angles in any triangles, quadrilaterals and regular polygons.
	Identify right angles including angles which are smaller than a right angle and angles which are larger than a right angle. Know how many right angles are in specific turns.		Identify angles at a point, angles on a straight line.	Recognise angles where they meet at a straight line or are vertically opposite and find missing angles.
			Draw given angles and measure them in degrees.	
				Illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius.

Geometry – position and direction		Describe movements between positions as translations of a given unit to the left/ right and up/down.	Identify, describe and represent the position of a shape following a reflection or translation, using the appropriate language, and know that the shape has not changes.	Draw and translate simple shapes on the co-ordinate place and reflect them in the axes.
		Describe positions on a 2D grid as co-ordinates in the first quadrant.		Describe positions on the full co-ordinate grid (all four quadrants).
		Plot specified points and draw sides to complete a given polygon.		
Statistics	Interpret and present data using bar charts, pictograms and tables.	Interpret present discrete and continuous data using appropriate graphical methods including bar charts and time graphs.	Complete, read and interpret information in tables including timetables.	Interpret and construct pie charts and line graphs and use these to solve problems.
	Solve one-step and two-step questions based on scaled bar charts, pictograms and tables,	Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.	Solve comparison, sum and difference problems using information presented in a line graph.	
				Calculate and interpret the mean as an average.

Reading
Give and explain the meaning of words in context.
Retrieve and record information/ identify key details from fiction and non-fiction.
Summarise main ideas from more than one paragraph.
Make inferences from the text/ explain and justify inferences with evidence from the text.
Predict what might happen from details stated and implied.
Identify/explain how information/ narrative content is related and contributes to meaning as a whole.
Make comparisons within the text.

Writing
Working Towards the Expected Standard
Write for a range of purpose.
Use paragraphs to organise ideas.
In narratives, describe settings and characters.
In non-narrative writing, use simple devices to structure the writing and support the reader (e.g. headings, subheadings, bullet points).
Use capital letters, full stops, question marks, commas for lists and apostrophes for contraction mostly correctly.
Spell correctly most words from the Year 3/ Year 4 spelling list, and some words from the Year 5/ Year 6 spelling list.
Write legibly.
Working at the expected standard.
Write effectively for a range of purposes and audiences, selecting language that shows good awareness of the reader.
In narratives, describe settings, characters and atmosphere.
Integrate dialogue in narratives to convey character and advance the action.
Select vocabulary and grammatical structures that reflect what the writing requires, doing this mostly appropriately.
Use a range of devices to build cohesion within and across paragraphs.
Use verb tense consistently and correctly throughout their writing.
Use a range of punctuation taught at Key Stage 2 mostly correctly.
Spell correctly most words from the Year 5/ Year 6 spelling list and use a dictionary to check the spelling of uncommon or more ambitious vocabulary.
Maintain legibility in joined handwriting when writing at speed.

Working at greater depth within the standard.
Write effectively for a range of purposes and audiences, selecting the appropriate form and drawing independently on what they have read as models for their own writing.
Distinguish between the language of speech and writing and choose the appropriate register.
Exercise an assured and conscious control over levels of formality, particularly through manipulating grammar and vocabulary to achieve this.
Use the range of punctuation taught at Key Stage 2 correctly (semi-colons, dashes, colons, hyphens) and, when necessary, uses such punctuation precisely to enhance meaning and avoid ambiguity.