

Multiplication and Division					
		Represent, Recall and Represent	Calculation	Problem Solving	Mixed Operations
Development Matters	0 -3				
	3 – 4				
	FS2				
White Rose	Y1			Solve one step multiplication and division problems with concrete objects, pictorial representations and arrays with the support of a teacher.	
	Y2	Recall and use multiplication and division facts for the 2,5 and 10 times tables. Recognise odd and even numbers Show that multiplication of two numbers can be done in any order but multiplication cannot.	Calculate multiplication and division within the timetables they know. Write calculations using $x \div =$.	Use arrays, materials and repeated addition to solve multiplication and division problems with multiplication facts they know.	
	Y3	Recall and use multiplication and division facts for the 3,4 and 8 times tables.	Calculate multiplication and division within the timetables they know including 2 digits by 1 digit.	Solve problems including missing numbers, scaling and correspondence problems.	
	Y4	Recall multiplication and division facts up to 12×12 .	Calculate multiplication and division within the timetables they know including 3 and 2 digits	Solve problems involving multiplying and adding, using distributive law, integer scaling	

		Use place value, known and derived facts to multiply and divide mentally including by 3 numbers. Multiply and divide by 0 and 1 Recognise and use factor pairs.	by 1 digit using formal written methods. Calculate multiplication and division within the timetables they know including up to 4 digits by 1 and 2 digits using formal written methods. Divide 4 digits by 1 digit using formal written methods interpreting remainders appropriately for the context. Multiply and divide both whole and decimal numbers by 10, 100 and 1000.	and harder correspondence problems.	
	Y5	Identify multiples and factor including finding all factors of a number and common factors of two numbers. Know and use the vocabulary of prime numbers, prime factors and composite numbers. Recall prime numbers up to 19 Recognise and use square and cube numbers.	Use long multiplication to multiply 4 digits by 2 digits. Use formal written methods of long division to divide 4 digits by 2 digits interpreting remainders as whole numbers and fractions. Perform mental calculations including with large numbers and mixed calculations.	Use knowledge of factors, multiples, squares and cubes to solve problems. Solve multiplication and division problems by scaling with simple fractions.	Solve problems using the four calculations and show an understanding of the meaning of the equals sign.
	Y6	Identify common factors and multiples and prime numbers. Use estimation to check answers and determine a degree of accuracy.		Solve problems using all four calculations.	Use their knowledge of order of operations to solve calculations using the four operations.
	KS3	Understand and apply the concept of multiples, factors and primes of individual, pairs or groups of numbers. For example,	Use formal methods for multiplication and division fluently including increasingly complex decimals.		Use and apply BIDMAS to the number system, ensuring the calculations are carried out in order.

		finding the Lowest Common Multiples of a pair of numbers.	Multiply and divide negative numbers.		
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