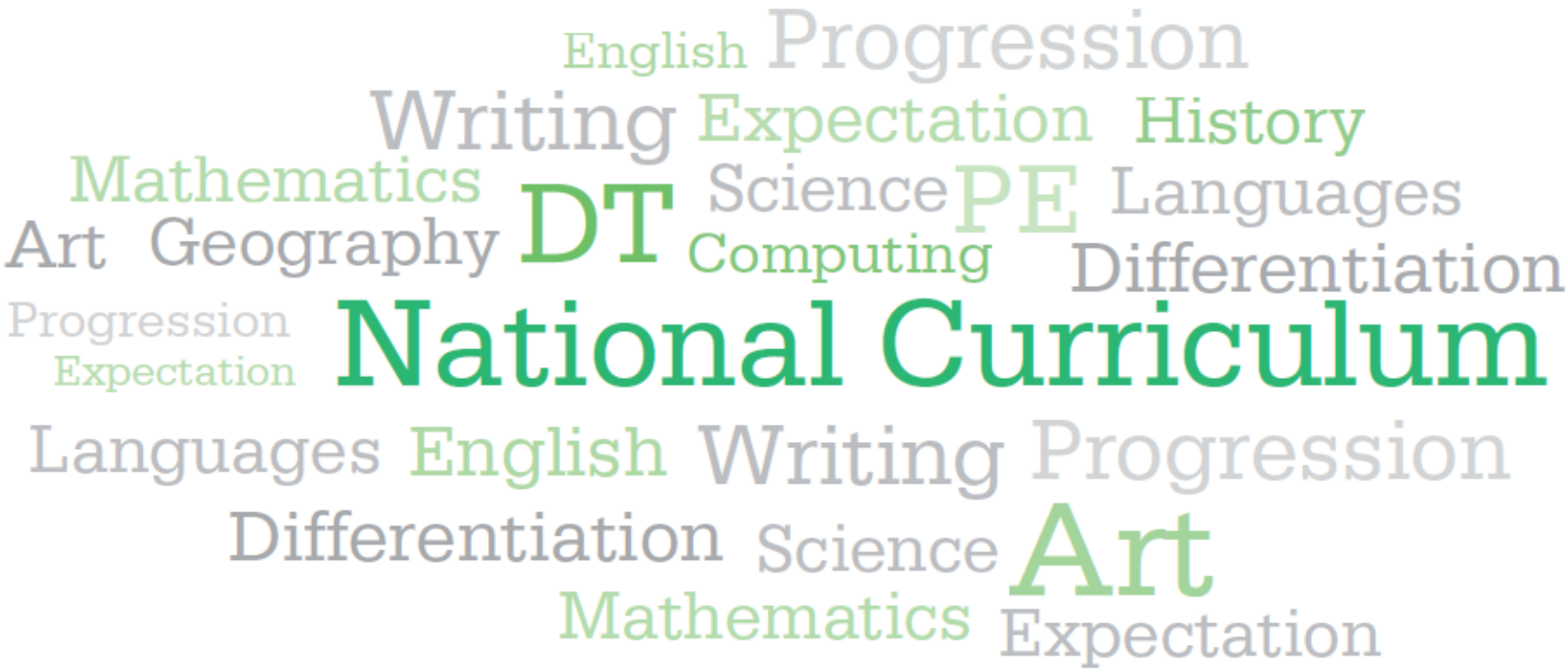
FOCUS MINIS

FOCUS EDUCATION



Progression in the new National Curriculum

Multiplication and division						
Rec/ELG	**Y1**	**Y2**	**Y3**	**Y4**	**Y5**	**Y6**
		Recall & use multiplication & division facts for the **2, 5, 10 tables**, incl recognising odd & even nos.	Recall & use the **multiplication & division facts for the 3, 4, 8 tables**.	Recall **multiplication & division facts for tables up to 12x12**	Identify all **multiples & factors**, including finding all factor pairs of a number, & common factors of two numbers.	Identify **common factors, common multiples & prime numbers.**
					Know & use the **vocabulary of prime numbers, prime factors & composite** (non-prime) numbers.	
					Establish where a number up to 100 is **prime** & recall prime numbers up to 19.	
		Calculate the **mathematical statements** for multiplication & division within the multiplication tables & write them using x ÷ = signs.				
		Show that multiplication of two numbers can be done in any order (**commutative**) & division of one number by another cannot.		Recognise & use factor pairs & **commutativity** in mental calculations.		
					Multiply & divide numbers **mentally** drawing upon known facts.	Perform **mental** calculations, incl mixed operations & large numbers.
			Write & calculate mathematical statements for multiplication & division **using the multiplication tables** that they know, incl 2-digit x 1-digit, using mental & progressing to formal written methods.	**Multiply** 2-digit & 3-digit numbers by a 1-digit number using formal written layout.	**Multiply** numbers up to 4-digits by a 1-digit or 2-digit number using a formal written method, including long multiplication for 2-digit numbers.	**Multiply** multi-digit numbers up to 4-digits by a 2-digit whole number using the formal written method of **long multiplication**.
					Divide numbers up to 4-digits by a 1-digit number using the formal written method of short division & interpret remainders appropriately for the context.	**Divide** numbers up to 4-digits by a 2-digit whole number using the formal written method of **long division**, & interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context.
						Divide numbers up to 4-digits by a 2-digit number using the formal written method of **short division** where appropriate, interpreting remainders according to the context.

				Use place value, known & derived facts to multiply & divide mentally, including **multiplying by 0 and 1**; **dividing by 1**; multiplying three numbers together.	**Multiply & divide** whole numbers & those involving decimals **by 10, 100 and 1000**.	
					Recognise & use **square numbers & cube numbers**, & the notation for squared ^{2} and cubed ^{3}.	
Solve problems, including doubling, halving & sharing. ELG	Solve **one-step problems** involving multiplication & division, calculating the answer using concrete objects, pictorial representations & arrays with the support of the teacher.	Solve **problems** involving multiplication & division, using materials, arrays, repeated addition, mental methods, & multiplication & division facts, incl problems in context.	**Solve problems**, incl missing number problems, involving multiplication & division, incl integer scaling problems & correspondence problems in which n objects are connected to m objects.	**Solve problems** involving multiplying and adding, including the distributive law to multiply 2-digit numbers by 1-digit, integer scaling problems & harder multiplication problems such as n objects are connected to m objects.	**Solve problems** involving addition, subtractions, multiplication & division & a combination of these, incl understanding the meaning of the equals sign.	Use knowledge of the order of operations to carry out calculations involving **four operations**.
					Solve problems involving multiplication & division, including scaling by simple fractions & problems involving simple rates.	**Solve problems** involving addition, subtraction, multiplication & division.
					Solve problems involving multiplication & division including using their knowledge of factors & multiples, squares and cubes.	