



Mathematics Progression– Multiplication & division



Recall/Use:
Identify common factors, common multiples & prime numbers.

Calculations:
Perform mental calculations, including with mixed operation & large numbers.

Calculations:
Divide numbers up to 4 digits by a two-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.

Calculations:
Multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication.

Problems:
Solve problems involving addition, subtraction, multiplication & division.

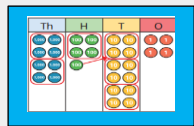
Problems:
Solve problems involving multiplication & division, including scaling by simple fractions & problems involving simple rates.

Combined:
Solve problems involving addition, subtraction, multiplication & division & a combination of these, including understanding the meaning of the equals sign.

Problems:
Solve problems involving multiplication & division including using their knowledge of factors & multiples, squares & cubes.

Year 6

Calculations:
Divide numbers up to 4 digits by a two-digit number using the formal written method of short division where appropriate interpreting remainders according to the context.

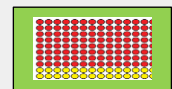


Recall/Use:
Use estimation to check answers to calculations & determine in the context of a problem an appropriate degree of accuracy.

Combined:
Use their knowledge of the order of operations to carry out calculations involving the four operations.

Calculations:
Multiply two-digit & three-digit numbers by a one-digit number using formal written layout.

Recall/Use:
Recognise & use square numbers & cube numbers, & the notation for squared (2) & cubed (3).



Recall/Use:
Establish whether a number up to 100 is prime & recall prime numbers up to 19.

Calculations:
Multiply & divide numbers mentally drawing upon known facts.

Year 5

Calculations:
Divide numbers up to 4 digits by a one-digit number using the formal written method of short division & interpret remainders appropriately for the context.

Calculations:
Multiply numbers up to 4 digits by a one – or two-digit number using a formal written method, including long multiplication for two-digit numbers.

Recall/Use:
Know & use the vocabulary of prime numbers, prime factors & composite (non-prime) numbers.

Recall/Use:
Identify multiples & factors, including finding all factor pairs of a number, & common factors of two numbers.

Calculations:
Multiply & divide whole numbers & those involving decimals by 10, 100 & 1000.

36×50	5×360	$180 \div 5$
500×36	360×500	$1,800 \div 5$

Year 4

Calculations:
Write & calculate mathematical statements for multiplication & division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental & progressing to formal written methods.

Recall/Use:
Recall & use multiplication & division facts for the 3, 4 & 8 multiplication tables.

Problems:
Solve problems, including missing number problems, involving multiplication & division, including positive integer scaling problems & correspondence problems in which n objects are connected to m objects.

Year 3

Recall/Use:
Recall multiplication & division facts for multiplication tables up to 12×12 .

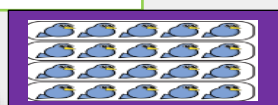
18		
6	6	6

Recall/Use:
Use place value, known & derived facts to multiply & divide mentally, including: multiplying by 0 & 1; dividing by 1; multiplying together three numbers.

Problems:
Solve problems involving multiplying & adding, including using the distributive law to multiply two-digit number by one digit, integer scaling problems & harder correspondence problems such as n objects are connected to m objects.

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Year 2



Calculations:
Calculate mathematical statements for multiplication & division within the multiplication tables & write them using the multiplication (\times), division (\div) & equals ($=$) signs.

Problems:
Solve problems involving multiplication & division, using materials, arrays, repeated addition, mental methods, & multiplication & division facts, including problems in contexts.

Recall/Use:
Show that multiplication of two numbers can be done in any order (commutative) & division of one number by another cannot.

Recall/Use:
Recall & use multiplication & division facts for the 2, 5 & 10 multiplication tables, including recognising odd & even numbers.

Year 1

Problems:
Solve one-step problems involving multiplication & division, by calculating the answer using concrete objects, pictorial representations, and arrays with the support of the teacher.

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