

Multiplication & Division curriculum road map



Solve Problems: Su1
Solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher

Y1

Calculations: A4, Sp1
Calculate mathematical statement for multiplication & division with the multiplication tables and write them using the signs (\times , \div and $=$)

Y2

Solve Problems: A4, Sp1
Solve problems involving multiplication & division, using materials, arrays, repeated addition, mental methods and multiplication and division facts, including problems in context

Calculations: A3, Sp1
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 and progressing to formal written methods

Solve Problems: Sp1
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

Y3

Recall, Represent, Use: A2
Recall & use multiplication & division facts for the 3,4 & 8 multiplication tables

Recall, Represent, Use: A4, Sp1
Recall & use multiplication and division facts for the 2,5,10 times tables, including recognising odd & even numbers
Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot.

Calculations: Sp1
Multiply two-digit & three-digit numbers by a one-digit number using formal written layout

Y4

Calculations: A2
multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication
divide numbers up to 4 digits by a two-digit whole number using the formal written method of long division, and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context
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
perform mental calculations, including with mixed operations and large numbers

Recall, Represent, Use: A4, Sp1
Recall multiplication & division facts for multiplication tables up to 12×12
Use place value, known facts & derived facts to multiply & divide mentally, including multiplying by 0 & 1; dividing by 1, multiplying together 3 numbers
Recognise & use factor pairs and commutativity in mental calculations

Solve Problems: A2
Solve problems including multiplying & adding, including using the distributive law to multiply two-digit numbers by one digit, integer scaling problems and harder correspondence such as n objects are connected to m objects.



Y5

Recall, Represent, Use: A4
Identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers
Know & use the vocabulary of prime numbers, prime factors & composite numbers
Establish whether a number up to 100 is prime and recall prime number up to 19
Recognise and use square numbers and cube numbers, & the notation for squared & cubed.

Calculations: A4, Sp1, Su1
Multiply numbers up to 4 digits by a one-digit number using formal written method, including long multiplication for two-digit numbers
Multiply & divide numbers mentally drawing upon known facts
Divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately
Multiply & divide whole numbers and those involving decimals by 10, 100 & 1000

Y6

Solve Problems: A4, Sp1
Solve problems involving multiplication & division including using their knowledge of factors and multiples, squares and cubes
Solve problems involving multiplication & division, including by scaling by simple fractions and problems involving simple rates

Recall, Represent, Use: A2
Identify common factors, common multiples & prime numbers
Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy

Solve Problems: A2
Solve addition, subtraction, multiplication & division

Combined Operations: A2
Use their knowledge of order of operations to carry out calculations involving the four operations