Haughton School Mathematics Multiplication and Division

Progression Map (Skills)

N

I can recall and use multiplication and division facts for the 8 multiplication table

I can recall and use multiplication and division facts for the 4 multiplication table

I can recall and use multiplication and division facts for the 3 multiplication table

N

Y3

I can solve problems involving multiplication and division including problems in contexts

I can show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot

I can connect the 10 multiplication table to place value and the 5 multiplication table to divisions on the clock face

I can link finding fractions of a quantity to division

I can calculate mathematical statements for division within the multiplication tables and write them using the division (÷) and equals (=) signs

I can count in twos, fives and tens from 0 up to 100 and identify a number in the 2, 5 and 10 times tables, and identify if a number is odd or even based on the digit in the ones place (Maths PKG)

I can write correct mathematical statements for multiplication within the multiplication tables and write them using the multiplication (×) and equals(=) signs

I can recall doubles and halves to total 20 and divide simple shapes into halves and quarters

I can recognise odd and even numbers

I can recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables

Y2

I can count in 2's, 5's and 10's

Y1

E

I can solve one-step problems involving multiplication and division by grouping and sharing small quantities

I can solve one-step problems involving multiplication and division by doubling small numbers and quantities

I can solve one-step problems involving multiplication and division by finding simple fractions of objects, numbers and quantities

I can put up to 20 items into groups of 2 or 5 or into 2 or 5 equal groups

N

I can solve problems involving multiplying and adding

I can solve problems involving multiplication

I can divide a 3-digit number by a 1-digit number using formal written layout

I can divide a 2-digit number by a 1-digit number using formal written layout

I can multiply a 3-digit number by a 1-digit number using formal written layout

I can multiply a 2-digit number by a 1-digit number using formal written layout

I recognise and use factor pairs and commutativity in mental calculations

I can multiply together three 1-digit numbers

I can multiply any number by zero and multiply and divide any number by 1

I can use place value and known and derived facts to multiply and divide mentally

I can recall multiplication and division facts for multiplication tables up to 12 × 12 from × 1 to × 12

Y4

I can recall multiplication and division facts for multiplication tables up to the 10 multiplication table from × 1 to × 10

I can recall multiplication and division facts for multiplication tables up to the 8 multiplication table from × 1 to × 10

I can solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects.

I can write and calculate mathematical statements for multiplication and division for a 2-digit number multiplied by a 1-digit number, using formal written methods and the multiplication tables I know

N

I can write and calculate mathematical statements for multiplication and division using the multiplication tables I know using mental methods

I can calculate mentally and write mathematical statements for multiplication and division of a 2-digit number multiplied by a 1-digit number using the multiplication tables I know

I can solve word problems that involve more than one steps (M5)

N

I can interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context.

I can divide numbers up to 4 digits by a two-digit whole number using the formal written method of long division

I can use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy.

Y6

I can solve problems involving multiplication and division including scaling by simple fractions and problems involving simple rates

I can solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign

I can solve problems involving multiplication and division and a combination of these including using my knowledge of factors and multiples, squares and cubes

- I can recognise and use square numbers and cube numbers, and the notation for squared (^{2}) and cubed (^{3})

I can multiply and divide numbers by 10, 100 and 1000 giving answers up to 3 decimal places

I can divide numbers up to 4 digits by a 1-digit number when the answer is not exact

I can divide numbers up to 4 digits by a 1-digit number when the answer is exact

I can multiply and divide numbers mentally drawing upon known facts

I can multiply numbers with up to 4 digits by a 2-digit number using a formal written method

I can multiply numbers with up to 4 digits by 1-digit number using a formal written method

I can establish whether a number up to 100 is prime and recall prime numbers up to 19.

I know and can use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers

Y5/6 N

I can identify multiples and factors

I can find all factor pairs

I can find common factors of two numbers

N

I can order of operations to carry out calculations involving the four operations.

D