Multiplication and Division

Selected National Curriculum Programme of Study Statements

Pupils should be taught to:

- recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables
- write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including 2-digit numbers times 1-digit numbers, using mental and progressing to formal written methods
- 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

The Big Ideas

It is important for children not just to be able to chant their multiplication tables but also to understand what the facts in them mean, to be able to use these facts to figure out others and to use in problems. It is also important for children to be able to link facts within the tables (e.g. 5× is half of 10×).

They understand what multiplication means, see division as both grouping and sharing, and see division as the inverse of multiplication.

Mastery Check

Please note that the following columns provide indicative examples of the sorts of tasks and questions that provide evidence for mastery and mastery with greater depth of the selected programme of study statements. Pupils may be able to carry out certain procedures and answer questions like the ones outlined but the teacher will need to check that pupils really understand the idea by asking questions such as 'Why?', 'What happens if …?', and checking that pupils can use the procedures or skills to solve a variety of problems.

Mastery	Mastery with Greater Depth
What is the relationship between these calculations? 3×4 4×8 4×3 8×4 *Children should understand that multiplication is commutative.*	What is the relationship between these calculations? 2×3 4×3 2×30 4×30 20×3 40×3 $20 \times 3 \times 10$ $40 \times 3 \times 10$ *Children should use their knowledge of place value to mentally calculate by multiples of 10.*
What do you notice about the following calculations? 3×4 3×8 4×4 4×8 3×5 3×10	Write these addition statements as multiplication statements: $2 + 2 + 2 + 2 + 4$ $3 + 3 + 3 + 2 + 4$

