Multiplication & Division

National Curriculum Aims

- recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers
- calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signs.
- show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot
- solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts.

Key Vocabulary

Column	An arrangement of objects or numbers up and down.
Divide	Share or group a quantity into a number of equal parts.
Division	Is an operation on numbers in which a number is shared or grouped equally into a number of parts.
Factor	A factor is a whole number that divides exactly into another number without leaving a remainder.
Multiple	A multiple is a number made by multiplying together two other numbers.
Multiplication	Is the operation of adding a number to itself a given number of times (repeated addition).
Multiply	To carry out the process of multiplication.
Product	When two or more numbers are multiplied together, the answer is the product of those numbers.
Repeated Addition	Repeatedly adding the same amount.
Row	An arrangement of objects or numbers going across.

Home Learning

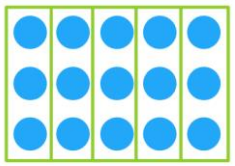
- Remember to use Times Table Rock Stars to help learn your times tables and related division.
- Explain how to use an array and repeated addition to an adult.

Core Knowledge and Representations

Multiplication

Array

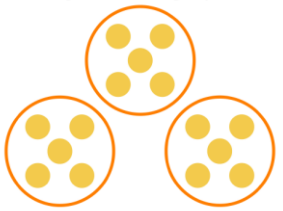
Rows and columns with an equal amount in each.



5 x 3 = 15

Equal Groups

Use the same number of ones in each group.



3 x 5 = 15

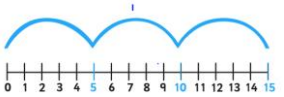
Repeated Addition

5 + 5 + 5 = 15

3 x 5 = 15

Number Line

Starting from zero, hop 5 at a time. Where do you land?



1 hop of 5 = 5
2 hops of 5 =10
3 hops of 5 = 15

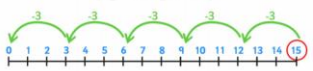
3 x 5 = 15

Division

Repeated Subtraction

You can use repeated subtraction to see how many times a smaller number goes into a bigger one.

15 ÷ 3 = ?



The number of times you can take 3 from 15 is 5.

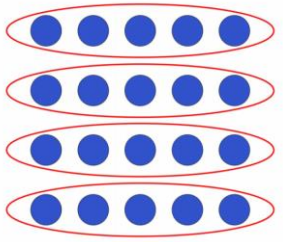
15 - 3 - 3 - 3 - 3 - 3 = 0

15 ÷ 3 = 5

Grouping

20 ÷ 5 = 4

20 divided by 5 gives 4 groups.



Grouping using arrays.