

## PROGRESSION OF MULTIPLICATION SKILLS in Key Stage 1

**Year 1** Multiply with concrete objects, arrays and pictorial representations.

**Key vocabulary:** groups of, lots of, times, array, altogether, multiply, count

**Key skills for multiplication at Y1:**

- Count in multiples of 2, 5 and 10.
- Solve one-step problems involving multiplication, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher.
- Make connections between arrays, number patterns, and counting in twos, fives and tens. Begin to understand doubling using concrete objects and pictorial representations.

**Year 2** Multiply using arrays and repeated addition (using at least 2s, 5s and 10s)

**Key vocabulary:** groups of, lots of, times, array, altogether, multiply, count, multiplied by, repeated addition, column, row, commutative, sets of, equal groups, \_times as big as, once, twice, three times...

**Key skills for multiplication at Y2:**

- Count in steps of 2, 3 and 5 from zero, and in 10s from any number.
- Recall and use multiplication facts from the **2, 5 and 10** multiplication tables, including recognising odds and evens.
- Write and calculate number statements **using the x and = signs**.
- Show that multiplication **can** be done in any order (commutative).
- Solve a range of problems involving multiplication, using concrete objects, arrays, repeated addition, mental methods, and multiplication facts.
- Pupils use a variety of language to discuss and describe multiplication.

**Video clips:**

<https://www.youtube.com/watch?v=YPWmOVt8vgw&list=PLQqF8sn28L9yj34NpXK7Yffze7ZoXTiix>

<https://www.youtube.com/watch?v=VGkjjVfnGYI&index=2&list=PLQqF8sn28L9yj34NpXK7Yffze7ZoXTiix>

[https://www.youtube.com/watch?v=sryJXZYSocE&index=1&list=PLQqF8sn28L9wjDm8uJEtRCDDoY6raPE\\_](https://www.youtube.com/watch?v=sryJXZYSocE&index=1&list=PLQqF8sn28L9wjDm8uJEtRCDDoY6raPE_)

## PROGRESSION OF DIVISION SKILLS in Key Stage 1

**Year 1** Group and share small quantities

**Key vocabulary:** share, share equally, one each, two each..., group, groups of, lots of, array

**Key skills for division at Y1:**

- Solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations arrays with the support of the teacher
- Understand the difference between grouping objects (how many groups of 2 can you make?) and sharing (share these sweets between 2 people).
- Through grouping and sharing small quantities, pupils begin to understand division and finding simple fractions of objects, numbers and quantities.
- They make connections between arrays, number patterns, and counting in twos, fives and tens.

**Year 2** Group and share, using the  $\div$  and  $=$  sign

**Key vocabulary:** share, share equally, one each, two each..., group, equal groups of, lots of, array, divide, divided by, divided into, division, grouping, number line, left, left over

**Key skills for division at Y2:**

- Use objects, arrays, diagrams and pictorial representations, and grouping on a number line.
- Count in steps of 2, 3, and 5 from 0
- 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 x,  $\div$  and = 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 context.

**\*Year 3:** Multiply 2-digits by a single digit number & introduce the **Grid Method**

Divide 2-digit numbers by a single digit & introduce the **Short Division method**

X	20	3
8	160	24

$$\begin{array}{r} 32 \\ 3 \overline{)96} \end{array}$$