

Guidance for teachers – KS1 Multiplication 2

2.2 Multiplication 2 Representing Equal Groups

These short videos are intended to provide your pupils with interactive lessons whilst they are learning from home. You can choose how regularly you set them for your class. Some of the learning might be consolidation and practice which aids confidence and retrieval and helps build firm foundations for moving on to future areas of mathematics. It is important that pupils experience these in the suggested order. They have been designed to be a coherent sequence of learning which builds on previous understanding and exemplify a [teaching for mastery approach](#).

General features of a teaching for mastery approach, which can be found within these lessons:

- **Stem sentences** which promote precise mathematical vocabulary and generalisations for all pupils
- **Representations** which are carefully chosen and can be concrete, iconic, or abstract and that move between the three.
- **Opportunities for deepening understanding for all pupils** - using small steps of learning enables pupils to learn together and gain deep conceptual understanding.
- **Independent practice and retrieval** - you could ask the children to send you their practice activities so that you can check understanding. You could also set supplementary activities to extend practice and develop fluency in counting in steps of 2, 5 and 10.

Lesson 9 - Introduction to the multiplication symbol

Repeated groups, that are equal, are used where they can be represented by a repeated addition expression. Alongside this expression the associated multiplication expression is introduced for example $4 + 4 + 4$ as 4×3 , said as four groups of three and four threes. At this stage, we have decided to show the first factor as the number of groups.

Lesson 10 - Matching repeated addition expressions to multiplication expressions

Snails and Numberblocks characters support children to see how a repeated addition expression can also be expressed as a multiplication expression. This deepens their understanding of how both expressions can be used to represent the same thing. At the end of this lesson, they are encouraged to make a matching activity that will be used again in a later lesson.

Lesson 11 - Matching multiplication expressions to images and contexts

Bongo the puppet explains how he has matched expressions from the previous lesson. This lesson then asks the children to use objects to represent multiplication expressions focusing on how many groups there are and how many are in each group. Children also look at a pictorial representation and insert missing numbers into a multiplication expression using this information.

Lesson 12 - Further reasoning about multiplication expressions

With a focus on what each number represents in a multiplication expression, children are encouraged to agree or disagree about whether a sentence matches a representation. For example, three Numberblock Four characters appear, and the children must agree or disagree whether there are three fours and then consider how this might be written as a multiplication expression.

Lesson 13 - Multiplication contexts involving zero and one.

This is the last lesson in this sequence of lessons. Numberblock Zero appears to support the children to understand how, for example, $0 + 0 + 0 + 0$ can be written as 4×0 . This is a difficult point for many children, but connections are made to previous representations to support them with understanding that the group size can be zero. Attention is also drawn to where a group size can be one.

These lessons have been planned from the NCETM Mastery PD Materials. Please access the original materials [here](#).

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