NATIONAL CENTREfor EXCELIENCE in the TEACHING of MATHEMATICS

## Guidance for teachers - KS1 Multiplication

### 2.1 Counting, unitising and coins

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 16 - How many coins are needed to buy an item? This lesson focuses on the value of the coin used to purchase items, and the number of coins needed is noted. Different strategies are used to support with keeping a track of how many coins are used such as organising them into groups of 10 using a tens frame, marking them off as well as keeping a record of the skip count with a number line.

Lesson 17 - Further practice buying items with different value coins. This is the last lesson that uses the segment 2.1 counting and unitising. The challenge activity at the end encourages children to consider the learning from the whole of this sequence of lessons where they look at the price of an item and consider which coins they could use. They then compare where there is more than one option and reason about whether they need more or fewer coins of a different denomination.

The two lessons above are the last in this unit of work. The intention was to prepare pupils for formal multiplication by thinking about units that have a value of more than one, as in the context of money.

These lessons have been planned from the NCETM Mastery PD Materials. Please access the original materials here.

With thanks to Amy Waldron (North West One Maths Hub), and Emma Parr (Bucks, Berks and Oxon Maths Hub); Kathryn Martin (Turing NW Maths Hub); Rebecca Docmanovic (London NE Maths Hub); Martin Tillbrook (East Midlands South Maths Hub).

