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 and10.

Lesson 11 - Compare the value of sets of coins (different denominations). This lesson focuses on noticing the number of coins, the value of each coin and the total value of the set using $1 \mathrm{p}, 2 \mathrm{p}$ and 10 p coins.

Lesson 12 - Make connections and apply learning in the context of a shop. Children use purses with either $1 p, 2 p, 5 p$ or $10 p$ coins in them and consider the question: What could I buy with the coins in each of these purses?

Lesson 13 - Find the total amount by combining different coins. Children group coins of the same denomination. They then work out the amount of each set, by skip counting, and then combine the sets to find the total amount. They are encouraged to use a tens frame to organise the count.

Lesson 14 - Find how many coins are needed to make a given value. Children use what they know about skip counting to solve problems where they work out many coins of each denomination are needed to buy a given item. They use the tens frame to support.

Lesson 15 - Further practice finding how many coins are needed to make a given value. This lesson provides children with the opportunity to practise using 5 p coins and 10 p coins as well as $1 p$ and $2 p$ coins.

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

With thanks to Kerry Harris (Cambridge Maths Hub), Dianne Ellithorn (North West One Maths Hub), Laura Richardson (Angles Maths Hub), Amy Waldron (North West One Maths Hub), and Emma Parr (Bucks, Berks and Oxon Maths Hub).

