Guidance for teachers – Lower KS2 Fractions 3

3.3 Non-unit fractions: identifying, representing, comparing

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.

Lesson 14 - This lesson consolidates previous learning and lays foundations for the next lesson. The main representation used is Cuisenaire® on screen so that pupils can visualise that the repeated addition of the unit fraction will equal one whole although this is more implicit at this stage. They will be able to complete missing number equations (without the scaffolding) to repeatedly add unit fractions.

Lesson 15 - Pupils return to the generalisation 'when the numerator and denominator are the same, the fraction is equivalent to one whole' but during this lesson will understand that this also means the fraction has a value of one and that they are found at the same point on the number line.

Lesson 16 - This lesson consolidates learning in the previous lesson and enables children to understand that any fraction where the numerator and the denominator are the same is equivalent to another, for instance $\frac{3}{3} = \frac{9}{9}$. There are several opportunities for pupils to make connections with prior learning and reason about their understanding.

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

With thanks to Janine Allen (Kent and Medway Maths Hub), Jonathan East (London Central and West Maths Hub) and Katie Ramsey (London Central and North West Maths Hub).