NCETM
NATIONAL CENTREfor EXCELLENCE in the TEACHING of MATHEMATICS

## Guidance for teachers - Lower KS2 Fractions 2

3.2 Unit fractions; identifying, representing, comparing

These short videos are intended to provide 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 onto 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 provide some fluency practice with multiplication facts.

Lesson 1 - Pupils will discover that the same whole can be divided into a differing number of equal parts. There is an opportunity to rehearse the associated language with this and to apply this knowledge to different contexts.

Lesson 2 - Pupils will learn to write formal notation of writing unit fractions and most importantly, will understand what each section means. A variety of common and less common 2D shapes are used to demonstrate this. This is the first time the term 'fraction' is used.

Lesson 3 - In this lesson, the terms 'numerator' and 'denominator' are introduced and the understanding of what each of these represents is reinforced.

Lesson 4 - Pupils will begin to assign a name to some unit fractions such as 'one half', 'one quarter' and will be able to extend this to some less familiar ones such as 'one fifty-seventh' because they understand the meaning. They build on previous learning by matching representations, fraction names and notation.

Lesson 5 - Learning from previous lessons will be built upon and applied to a linear model to represent unit fractions. This lesson involves dividing paper strips into equal parts before then naming and writing the fraction notation

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

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