

## 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 while 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, maybe from a textbook to extend practice and develop fluency. Lesson 12 in particular focuses on the children developing fluency in counting in unit fractions - you could practise this, forwards and backwards to support addition and subtraction of fractions in future learning.

**Lesson 10** - In prior learning, pupils have understood fractions as operators (one half of the shape, three quarters of the line, etc). In this lesson, pupils are carefully introduced to the fact that fractions are also numbers and can be placed on a numberline. Using a familiar vertical representation initially before moving to a horizontal representation, then moving to numberlines which importantly begin with zero in this lesson. Pupils will begin to understand that the point on the numberline has equal value to the fraction it is labelled with.

**Lesson 11** - This lesson is designed to build experience of moving between fractions as operators and fractions as numbers. Different denominators and a range of representations are used so that pupils continue to build this concept.

**Lesson 12** - During this lesson, pupils will get the opportunity to build their fluency in counting in unit fractions and using the number line to demonstrate this. Dual counting is an important part of this lesson so that the children can really understand that a non-unit fraction is equal to several unit fractions with the same denominator.

**Lesson 13** - Pupils begin to be able to express non-unit fractions as equations. For example, they will see

that three one fifths, three fifths has equal value to  $\frac{1}{5} + \frac{1}{5} + \frac{1}{5}$ . It has equal value because it is in the same place on a numberline.

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

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