Guidance for teachers – Lower KS2 Fractions 2

3.2 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 11 - Pupils build on previous work when they compared relative size of parts of the same whole. In this lesson, they use the unit fraction name and notation to generalise that when comparing unit fractions, the greater the denominator, the smaller the fraction. The children will understand and build a fraction wall to help demonstrate this and will begin to use the inequality symbols (< and >) to express the comparisons.

Lesson 12 - In this lesson, there are plenty of opportunities to apply their understanding of the generalisation in Lesson 11. Questions and activities are designed to allow children opportunities to reason about comparing the size of unit fractions when the whole is the same.

Lesson 13 - There are additional opportunities to compare unit fractions, this time in a measure's context. The pupils are encouraged to estimate unit fractions using their previous understanding of unit fractions and their relationship with the whole.

Lesson 14 - Pupils will discover that in order to compare unit fractions, the wholes must be the same. This is exemplified with different contexts and representations including capacity, a linear journey, and an area model.

Lesson 15 - During this lesson, pupils will be able to construct a whole, given one part and the fraction of that whole that this represents. They will be encouraged to see the multiplicative relationship between unit fractions and the whole and will reason about this.

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

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