

## Guidance for teachers – KS1 Number, Addition and Subtraction

### 1.7 Addition and Subtraction: Calculation Strategies within 10

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 in recalling number bonds to 10.

#### Lesson 6 Reasoning about expressions using number bonds to 10

Recognise expressions that sum to 10. Use the = < and > signs and reasoning to explain if they don't sum to 10. Attention is drawn to the fact that the children should be able to make the decision at a glance and not have to work out the sum.

#### Lesson 7 Use knowledge of pairs of numbers that sum to 10, to subtract from 10

Children draw upon their partitioning knowledge to see that they don't need to 'count back' to subtract from 10 – they can use their knowledge of pairs that make ten to perform the subtraction in one step. Missing difference and missing subtrahend problems are given for practice.

#### Lesson 8 Adding one gives one more

Through counting, 'One, two, three, four, five, six...' knowledge of saying the number names in the right order is established. This is then used to work out one more. Children who count silently to work out what 'one more' is, are then supported to move beyond this as a strategy so that they can identify one more without counting. Aggregation and augmentation structures are used working toward a generalised statement 'Adding one gives one more.'

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

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