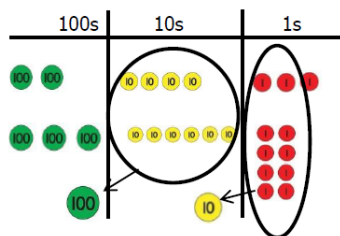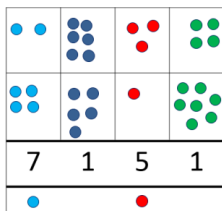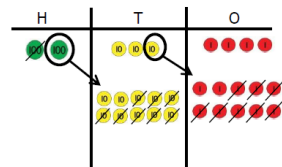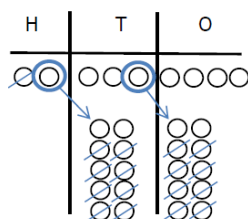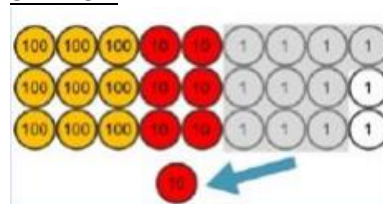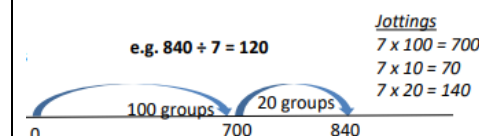| Addition	Subtraction	Multiplication	Division
Mental methods These should continue to develop, supported by a range of models and images, including the number line. Part-part-whole and bar models should continue to be used to help with calculating. **Addition of numbers with up to 4-digits using compact column addition** **Concrete** **Pictorial** **Abstract** nb – apply previous steps to decimals in the context of money using coins and place value counters to support. 	**Mental methods** These should continue to develop, supported by a range of models and images, including the number line. Part-part-whole and bar models should continue to be used to help with calculating. **Subtraction of numbers with up to 4-digits using compact column subtraction** **Concrete** 234 – 188 **Pictorial** **Abstract** nb – apply previous steps to decimals in the context of money using coins and place value counters to support 	**Mental methods** Counting in multiples of 6, 7, 9, 25 and 100, and steps of 1/10 and 1/100. Recall multiplication facts for multiplication tables up to 12 × 12. Use these facts to solve problems mentally. **Multiplication of 2 digit by a 1 digit using a formal written method (short multiplication)** **Concrete** Use place value counters to solve calculations to model regrouping. **324 x 3 =** **Pictorial** Represent using bar models, part-part whole models and drawing counters. **Abstract** Expanded short multiplication (linking to grid method) moving towards the compact method. 	**Sharing, grouping and using a number line using decomposition** Children will continue to explore division as sharing and grouping on a number line moving from partitioning to decomposition. **Concrete** Use a range of practical resources: place value counters, dienes blocks. **Pictorial** **Abstract** 840 ÷ 7 = 700 ÷ 7 = 100 140 ÷ 7 = 20 So, 840 ÷ 7 = 120 **Formal Written Methods** Children should progress in their use of written division calculations: • Using tables facts with which they are fluent • Numbers should have **no** exchanging and regrouping initially until concept fully understood. • Experiencing a logical progression in the numbers they use, for example: Dividend just over 10x the divisor, e.g. 84 ÷ 7 All of the above stages should include calculations with remainders as well as without.

Short division (2d by 1d)

Concrete

Short division to be modelled for understanding using place value counters.

$96 \div 3 =$
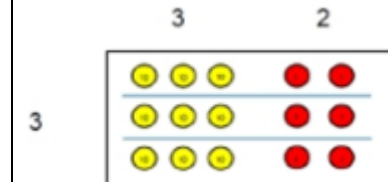
Pictorial

Draw place value counters in books to support solving.

Abstract

$72 \div 4 = 18$