

Overview

Fractions, decimals and percentages are frequent areas of difficulty in mathematics for primary school pupils. Many teachers find them challenging to teach and pupils often have limited or only partially developed conceptual understanding of the topics. A major reason children struggle with fractions, decimals and percentages is the variety of contexts and representations in which they appear – for example, as areas, as sets, on number lines, as a result of a division problem and in relation to measurements.

Schofield & Sims Fractions, Decimals and Percentages is a structured whole-school programme designed to help pupils develop a deep, secure and adaptable understanding of these topics. The series consists of six pupil books and six teacher's guides, one for each primary school year.

Each unit of the programme addresses a single learning objective. The teacher's guides provide detailed teaching notes with accompanying graphics to use in lessons. The pupil books provide a summary of the learning objective and a set of related practice questions that increase in difficulty. This allows you, the teacher or adult helper, to introduce and teach a particular concept and then to provide appropriate intelligent practice which gradually leads children towards more complex representations and varied contexts.

Supporting a mastery approach, all pupils are encouraged to move at the same pace through the units and are given the same opportunity to fully understand the concept being taught. Depth of learning is emphasised over speed of learning and the pupils should have a solid understanding of the content of each unit before moving on to new material. Downloadable **Go deeper** extension resources help to cement pupils' understanding of the concepts that have been taught. The series also provides ongoing and integrated assessment throughout.

Fractions 3 and the National Curriculum

Fractions 3 and its related **Teacher's Guide** match the statutory requirements for Year 3 for 'Fractions' in the National Curriculum. The seven statutory requirements are listed below. They have been coded for ease of reference. For example, Y3/F1 refers to the first fractions requirement in Year 3.

National Curriculum requirements for 'Fractions'

- Y3/F1** Count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10.
- Y3/F2** Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators.
- Y3/F3** Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators.
- Y3/F4** Recognise and show, using diagrams, equivalent fractions with small denominators.
- Y3/F5** Add and subtract fractions with the same denominator within one whole (for example, $\frac{5}{7} + \frac{1}{7} = \frac{6}{7}$).
- Y3/F6** Compare and order unit fractions, and fractions with the same denominators.
- Y3/F7** Solve problems that involve all of the above.