

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 a 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 1 and the National Curriculum

Fractions 1 and its related **Teacher's Guide** match the statutory requirements for Year 1 for 'Fractions' in the National Curriculum. The two statutory requirements are listed below. They have been coded for ease of reference. For example, Y1/F1 refers to the first fractions requirement in Year 1.

National Curriculum requirements for 'Fractions'

- Y1/F1** Recognise, find and name a half as one of two equal parts of an object, shape or quantity.
- Y1/F2** Recognise, find and name a quarter as one of four equal parts of an object, shape or quantity.

While it is not a statutory requirement that Year 1 children master the fractional notation for halves and quarters, this series includes it because familiarity with the notation can help to form a vital foundation for the understanding of fractions in future years. Young children may have already encountered this in real-life situations and it is useful to build on this knowledge.

This series sets quite demanding expectations for reading ability which some children may find challenging. To ensure that the children are all given the opportunity to succeed, it is helpful, where possible, for an adult to work through the materials with groups and to read each question aloud. This may also encourage good discussion between the children and can help you to spot and challenge misconceptions.