

Master Representing Numbers with up to 2 Decimal Places

Rationale

In this step, pupils will build upon their understanding of decimal numbers by representing ones, tenths and hundredths in different ways. They will practise and become familiar with representing decimal numbers with up to 2 decimal places using a variety of concrete apparatus in order to fully access the subsequent small steps.

Pupils will need access to a variety of concrete apparatus, as shown below, to complete this practical step.



Key Stem Sentences

- There are ___ ones ___ tenths and ___ hundredths.
- The number is ___ . ___



Key Vocabulary

- ones
- tenths
- hundredths



Common Errors or Misconceptions

- Pupils may misuse the apparatus used to represent different values. For example, they may choose the incorrect place value counter.



Key Representations

Dienes



There are 2 ones, 1 tenth and 9 hundredths. The number is 2.19

Place Value Counters



There are 3 ones and 4 tenths. The number is 3.4

Place Value Charts

1s	0.1s	0.01s
5	7	4

There are 5 ones, 7 tenths and 4 hundredths. The number is 5.74

Arrow Cards



There are 8 ones and 6 hundredths. The number is 8.06

Gattegno Chart

1	2	3	4	5	6	7	8	9
0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9
0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09

There are 9 ones, 6 tenths and 4 hundredths. The number is 9.64



Pupils will FLOURISH if they can...

- accurately represent decimal numbers with up to 2 decimal places using a variety of concrete apparatus.
- explain their understanding using 'Decide, Assess, Back up' with representations.

