

Lesson 21 **NUMBER****Dividing decimals in context**

## CURRICULUM ALIGNMENT

NUM.OPS.4

build upon, select and make use of a range of operation strategies.

MEA.MON.4

solve and pose practical tasks to investigate and make informed judgements about transactions and financial plans.

MEA.MSR.4a

determine and calculate units of measurement in fractional and/or decimal form to solve practical problems.

INTERACTIVES **Equal Groups (Sharing)** · display, explore

## WHAT THIS LESSON TEACHES

When dividing a decimal amount by a whole number, line up the decimal point in the answer directly above the one in the amount being shared so each digit stays in its place-value column.

→ €15.75 shared among 5 friends is €3.15 each.

→ Sharing €10 among 3 gives €3.33 each with 1c left over that cannot be split.

## MODEL THIS ON THE BOARD

**SHARING A BILL**

- 1 Write  $€15.75 \div 5$  with the decimal point in the answer lined up above the point in 15.75.
- 2 Divide each digit in turn starting from the left, keeping every digit in its correct column.
- 3 The answer is 3.15 so each friend pays €3.15.

## ANSWER KEY

a) 2.35

b) 1.20

c) 5.85

Q1: €2.55

Q2: €1.80

Q3: 0.625 l

a) **Always** : This keeps every digit in its correct place-value column.

b) **Sometimes** : True for  $€10 \div 3$ ; false for  $€10 \div 2$ .

c) **Always** : The point stays fixed so place value is preserved.

d) **Never** :  $1 \text{ m} \div 3$  is 33.333... cm; the 3s go on, so you round, for example to 33.3 cm.