TEACHER RESOURCE BOOK · MATHS FOR 4TH CLASS

Lesson 18 NUMBER

Written subtraction of 4-digit numbers

WHAT THIS LESSON TEACHES

To subtract 4-digit numbers, line up thousands, hundreds, tens and units. Work from the right, and when a column is too small to take from, rename one from the column on its left as ten in the current column. If that column is a zero, the borrow keeps travelling left, turning each 0 into a 9.

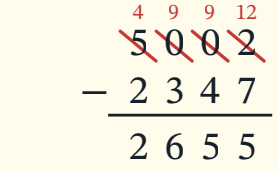
→ 4,253 - 1,678 = 2,575 (check: 2,575 + 1,678 = 4,253)

→ 5,000 - 2,648 = 2,352

MODEL THIS ON THE BOARD

WRITTEN SUBTRACTION ACROSS ZEROS

1. Set out **5002 − 2347** in Th H T U columns.
2. Units cannot take 7, so rename from the thousands: hundreds and tens become **9**, units become **12**.
3. Subtract down each column: 12 − 7 = **5**, 9 − 4 = **5**, 9 − 3 = **6**, 4 − 2 = **2**.



DISCUSSION STARTER

REFLECT Which rename was trickiest — across a zero, or in more than one column?

ANSWER KEY

a) 3687

b) 3158

c) 3407

Q1: 3,324 fans

Q2: 1,834 tickets

Q3: 4,160

Q4: 2,558

a) Sometimes — You only rename when a column has too few to take from, such as 4,253 - 1,678, but not for 4,568 - 1,234.

b) Always — Each empty column cannot give and passes the borrow on, turning each 0 into a 9.

c) Always — This check works every time a subtraction is done correctly, as in 2,575 + 1,678 = 4,253.

d) Sometimes — 5,002 - 2,347 gives a 4-digit answer, but 4,003 - 3,999 gives only 4.

EXTENSION SHEET · STRETCH ANSWERS

S1: 3943

S2: 2988

S3: 5644

S4: 264

S5: 237

Investigation: How many renames? — open-ended; scan pupils' working for valid solution paths rather than a single answer.