

Multiplying a multi-digit number by a single digit

MODULE 2 · OPERATIONS AND COMPUTATIONAL FLUENCY NUMBER

38 × 6 (USING THE AREA MODEL)

	× 30	× 8
6	180	48

Total: 180 + 48 =

- 1 Split 38 into 30 + 8.
- 2 Multiply each part by 6: 30 × 6 = 180; 8 × 6 = 48.
- 3 Add the partial products: 180 + 48 = 228.

TRY IT ON THE LINE

Use the area-model rectangle as your scratch pad. Partition the bigger number into hundreds + tens + ones, multiply each part by the single-digit factor, then total.

- 1. Compute 23 × 4 with the area model.
- 2. Compute 47 × 6.
- 3. Compute 235 × 7.
- 4. Compute 138 × 6 (matches the diagram).

PRACTICE

- 1 On sports day, 5th class set up 5 long jump lanes along the school field. Each lane is marked out with 695 cm of measuring tape. How many centimetres of tape are used in total?
- 2 The local hurling club sold 251 match programmes at each of the 7 home games this season. How many programmes did the club sell in total?

CHALLENGE

- 1 On the school nature walk through the local park, 5th class count 3427 steps along one loop of the trail. The teacher tells them they will walk the same loop 7 times across the term. How many steps will they take in total?
- 2 The school library has 4190 books on its shelves. The principal orders the same number of books for each of the 7 primary schools in the parish. How many books are needed in total?