

Multiplying multi-digit whole numbers

WHAT THIS LESSON TEACHES

To multiply multi-digit whole numbers split each into tens and units to find four partial products then add them all.

→ In 34×26 split 34 into 30 and 4 and 26 into 20 and 6 to get partial products like $30 \times 20 = 600$

→ 47×38 splits into 40×30 40×8 7×30 and 7×8

MODEL THIS ON THE BOARD

BUILD THE AREA MODEL FOR 47×38

- ① Split 47 into 40 and 7 down the side and 38 into 30 and 8 along the top
- ② Find the four partial products 40×30 40×8 7×30 and 7×8
- ③ Add all partial products to reach the total product

ANSWER KEY

c) 600, 180, 80, 24

Q1: 1537 books

Q2: 2535 pencils

Q3: 3648 pages

Q4: 9205 chairs

Q5: 14628 stickers

a) Always — The parts cover the whole multiplication without overlap or gap.

b) Sometimes — Different splits like $30+4$ or $20+14$ still add to 884 but the individual products differ.

c) Never — The area model method relies on calculating and adding those partial products.

d) Always — Each box in the grid holds one partial product needed for the total.

EXTENSION SHEET · STRETCH ANSWERS

S1: 29330

S2: 30474

S3: 23989

S4: 1757

S5: 2241