

Multiplying by 10, 100, 1000

WHAT THIS LESSON TEACHES

When you multiply by 10, 100 or 1 000, every digit moves to a place that is 10, 100 or 1 000 times bigger. The **digits stay the same — they just move.**

→ $1.9 \times 10 = 19$ (each digit moves one place to the left).

→ $1.9 \times 100 = 190$ (two places).

→ $1.9 \times 1\,000 = 1\,900$ (three places).

MODEL THIS ON THE BOARD

$$1.9 \times 100$$

① Multiplying by 100 means each digit moves two places to the **left**.

② $1.9 \rightarrow 19$ (moved one place) $\rightarrow 190$ (moved two places).

③ Check: $1.9 \times 10 = 19$, then $\times 10$ again = **190**. ✓

ANSWER KEY

a) $47 \times 10 = 470$ (47 stays the same; a 0 fills the units).

b) $47 \times 100 = 4,700$.

c) $4.7 \times 1000 = 4,700$ (the decimal point vanishes as the digits shift left of it).

Q1: 747.6

Q2: 2428

Spot: Sean moved the decimal point right but wrote zeros after it instead of moving the digits. $0.6 \times 100 = 60$ (the 6 moves to the tens place).

EXTENSION SHEET · STRETCH ANSWERS

S1: 761.73

S2: 2387

S3: 952.2