

## Partitioning numbers

### WHAT THIS LESSON TEACHES

Partitioning means splitting a number into the value of its hundreds, tens and units. The parts can be added back to make the starting number again.

→  $256 = 200 + 50 + 6$

→  $138 = 100 + 30 + 8$

### MODEL THIS ON THE BOARD

#### HOW TO PARTITION 256

- ① Look at the number **256** carefully.
- ② The hundreds digit is **2**, so its value is **200**.
- ③ The tens digit is **5**, so its value is **50**.
- ④ The units digit is **6**, so its value is **6**.
- ⑤ Write the partition as  $256 = 200 + 50 + 6$  and add the parts to check.

### DISCUSSION STARTER

**REFLECT** Does splitting a number into hundreds, tens and units make it easier to work with? Why?

### ANSWER KEY

a) 1 3 8

b) 2 5 6

c) 2 5 0

Q1:  $100 + 30 + 8$

Q2:  $200 + 0 + 5$

Q3:  $100 + 40 + 0$

Q4:  $200 + 50 + 0$

a) **Always** — Place-value parts are exact so their total must equal the starting number.

b) **Always** — Hundreds are counted in full hundreds such as 100 or 200.

c) **Never** — A zero digit makes that place-value part zero, so fewer than three non-zero parts.

d) **Always** — A single units digit can only be from 0 to 9.