

Partitioning numbers

CURRICULUM ALIGNMENT

NUM.PVT.3 explore equivalent numerical expressions of numbers using the base ten system.

INTERACTIVES **Place Value Blocks (Dienes)** · challenge, display, explore

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.

$$\rightarrow 256 = 200 + 50 + 6$$

$$\rightarrow 138 = 100 + 30 + 8$$

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: $200 + 50 + 6$ Q5: $200 + 50 + 0$ Q6: $100 + 10 + 6$

Spot: Cian counted the units twice and never split the tens. $256 = 200 + 50 + 6$.

EXTENSION SHEET · STRETCH ANSWERS

S1: 2486, 2963, 7553, 7628

S2: 249, 565, 570

S3: 299, 695, 967