

Reading and writing numbers to millions

MODULE 1 · PLACE VALUE, DECIMALS AND THE NUMBER SYSTEM NUMBER

Place value keeps going past thousands: **ten-thousands, hundred-thousands, then millions**. Each place is **ten times** the place to its right.

- **3,250,000** reads as *three million, two hundred and fifty thousand*.
- Group digits in **threes from the right** to make big numbers easy to read.

WRITE 'TWO MILLION, FORTY THOUSAND AND SIX' IN DIGITS

- Two million → **2,000,000**.
- Forty thousand → **40,000**; six → **6**.
- Add the parts: $2,000,000 + 40,000 + 6 = \mathbf{2,040,006}$.
- Mind the zeros — there are no hundred-thousands, thousands, hundreds or tens.

HOW TO ANSWER TODAY

- **Expanded form.** Write the number as a sum of its place values. Skip any part that is 0.
 $3,482 = 3,000 + 400 + 80 + 2 \cdot 70,050 = 70,000 + 50$
- **Value of a digit.** Find which place the digit sits in, then write what it is worth there as a number (not the place name).
 In 3,742 the digit 7 sits in the hundreds place. Its value is 700.

WARM-UP

Insert <, > or =

a. $2 \square - 4$

b. $5 \square - 3$

c. $5 \square - 4$

d. $-3 \square - 2$

PRACTICE

- The Cumann na mBunscol website reports that **485,708** pupils have taken part in school blitzes across the country since the competition began. Write **485,708** in expanded form.
- Four members of the local hurling club check the balances on their club savings accounts before the team dinner. The balances in euros are **-1**, **14**, **8** and **7**. Order the balances from smallest to largest.
 Order from smallest (most negative) to largest: -1, 14, 8, 7

CHALLENGE

- Cian checks the thermometer outside his classroom window at four different times during the school day and notes the readings in °C as **2.7**, **2.6**, **-4.6** and **9.0**. Order the temperatures from smallest to largest.
 Order from smallest (most negative) to largest: 2.7, 2.6, -4.6, 9
- 5th class are decorating a World Book Day display board with the total number of words read by all the pupils in the school this term: **6,204,109**. What is the value of the digit **2** in this number?
 In 6,204,109, what is the value of the digit 2? (Each zero still holds a place.)