

# 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.  $5 \square - 4$

b.  $5 \square - 3$

c.  $-3 \square - 2$

d.  $-3 \square 8$

## PRACTICE

- On four winter mornings before training at the local hurling pitch, Tadhg checks the thermometer and writes down the readings in degrees Celsius: **-1**, **15**, **9** and **-10**. Order the temperatures from smallest (coldest) to largest (warmest).

Order from smallest (most negative) to largest: -1, 15, 9, -10

- 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.

## CHALLENGE

- On a school tour to Glendalough in Wicklow, the 5th class checks the thermometer at four different spots during the day. The readings in degrees Celsius are **8.3**, **6.7**, **0.1** and **-4.7**. Order the temperatures from smallest to largest.

Order from smallest (most negative) to largest: 8.3, 6.7, 0.1, -4.7

- 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.)