Lesson 4

Decimals on a number line

MODULE 1 · PLACE VALUE AND THE DECIMAL NUMBER SYSTEM NUMBER

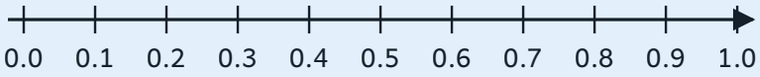
A decimal number sits **between** two whole numbers on a number line. The tenths divide each whole into ten equal parts.

→ **0.4** is just under halfway between 0 and 1.

→ **1.7** sits seven-tenths of the way from 1 to 2.

TRY IT ON THE LINE

Mark each value on the number line with a small cross and label it with its letter.



1. Mark **A** at **0.3**.
2. Mark **B** at **0.7**.
3. Mark **C** at **0.45** (about halfway between two ticks).
4. Mark **D** at **0.85**.

PRACTICE

1. On the coach trip to the Burren, **3/5** of the 5th class pupils choose to bring a packed lunch from home. Write this fraction as a decimal and as a percentage.

 Express 3/5 as a decimal and as a percentage.

2. 5th class are decorating the school hall for World Book Day, and Mr Ó Briain pins up a poster showing the total number of pages read by all the classes this term: **485,708**. He asks the pupils to write **485,708** in expanded form, with one part for each non-zero place value. What is the expanded form?

 Write 485,708 in expanded form (one part per non-zero place value).

CHALLENGE

1. Mr Ó Briain's 5th class is lining up at the door before going out to the yard. He shows the class a **10** × **10** grid on the whiteboard with **100** small squares and asks them to shade **17%** of it. How many of the small squares should be shaded?

 To shade 17% of a 10×10 grid, how many of the 100 small squares should you shade?

2. At the GAA county final in Croke Park, Saoirse sees on the big screen that **8,307,014** spectators have attended matches there since records began. She points at the digit **4** in the number. What is the value of that digit?

 In 8,307,014, what is the value of the digit 4? (Each zero still holds a place.)