

Lesson 7 **NUMBER**

Placing and estimating numbers on a 0–1,000 number line

CURRICULUM ALIGNMENT

NUM.PVT.3

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

INTERACTIVES

Number Line · challenge, display

WHAT THIS LESSON TEACHES

A straight 0 to 1,000 number line has marks at every hundred. To place or estimate a number, find the nearest hundred landmarks and judge how far it sits between them.

→ On a 0 to 1,000 line, 500 sits exactly in the middle.

→ To place 615 you first find the 600 landmark, then nudge a little to the right.

MODEL THIS ON THE BOARD

PLACING 480 ON THE LINE

- 1 Spot the hundred marks around 480: **400** and **500**.
- 2 480 is 80 past 400, so it sits most of the way toward **500**.
- 3 Mark an arrow a little to the left of the **500** landmark and label it 480.

DISCUSSION STARTER

REFLECT

When you estimated on the number line, were you usually close? What helped you?

ANSWER KEY

Scaffold: visual check on the page

Q1: exactly at the 300 mark

Q2: halfway between 200 and 300

Q3: halfway between 500 and 600

Q4: between 600 and 700, nearer 600

Q5: closer to 800

a) Always : Halfway from 0 to 1,000 is always 500.

b) Always : 150, 250, 350 and so on always fall midway between hundreds.

c) Always : 170 is 30 from 200 and 70 from 100.

d) Sometimes : True for 300; false for 350, which sits halfway between 300 and 400.

EXTENSION SHEET · STRETCH ANSWERS

Investigation: Landmarks on the line — open-ended; scan pupils' working for valid solution paths rather than a single answer.