

Placing and estimating numbers on a number line

WHAT THIS LESSON TEACHES

A number line is a straight line where numbers sit in order. Use landmarks you already know, like the start, the middle and the end, to judge roughly where a number belongs.

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

→ 3,200 on a 0-to-6,000 line lands just past the 3,000 mark, close to halfway.

MODEL THIS ON THE BOARD

PLACING 750 ON A 0–1,000 LINE

- ① The line runs from **0** to **1,000**, so the middle landmark is **500**.
- ② **750** is bigger than **500**, so it sits between **500** and **1,000**.
- ③ **750** is halfway from **500** to **1,000**, so mark it in the middle of that half.



DISCUSSION STARTER

REFLECT What landmarks on a number line help you place a number quickly?

ANSWER KEY

b) 500

Q1: $\frac{1}{4}$ of the way (at 250)

Q2: $\frac{1}{4}$ of the way (at 250)

Q3: just past 600

a) Always — 500 is half of 1,000, so it is always the midpoint.

b) Always — Any value above the middle landmark lies between 500 and 1,000.

c) Always — 250 is less than 500, so it lands in the first half, closer to 0.

d) Sometimes — Sometimes a nearest-thousand or nearest-hundred landmark helps more than the middle.

EXTENSION SHEET · STRETCH ANSWERS

S1: between 9,400 and 9,500, nearer 9,500

S2: between 4,700 and 4,800, nearer 4,800

S3: between 9,700 and 9,800, nearer 9,800

S4: between 8,100 and 8,200, nearer 8,200

S5: between 4,700 and 4,800, nearer 4,800