

Lesson 13 **NUMBER****Mental addition strategies – partition, count-on, near-doubles**

WHAT THIS LESSON TEACHES

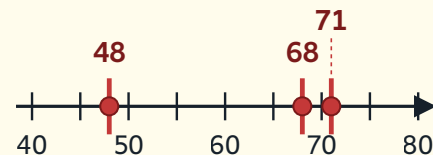
To add in your head, split one number into tens and units, add the tens first, then the units. You can also count on in small hops, or use a near double.

- $38 + 27$: add 20 to get 58, then add 7 to land on 65.
- $46 + 9$: hop 4 to reach 50, then 5 more to land on 55.
- $35 + 36$: double 35 to get 70, then add 1 to land on 71.

MODEL THIS ON THE BOARD

PARTITION $48 + 23$

- 1 Split 23 into tens and units: **20** and **3**.
- 2 Add the tens: $48 + 20 = 68$.
- 3 Add the units: $68 + 3 = 71$.



DISCUSSION STARTER

REFLECT

Which mental addition strategy felt quickest today — partition, count-on or near-doubles — and why?

ANSWER KEY

- a) $38 + 27$: partition into tens and units
- b) $65 + 8$: count on from the larger
- c) $25 + 26$: near-doubles
- d) $70 + 30$: add the tens

Q1: 64 points

Q2: 55 tickets

Q3: 72 laps

Q4: 78 frees

a) **Never** — The lesson teaches three strategies: partition, count on and near doubles.

b) **Always** — The lesson explains to split one number into tens and units.

c) **Never** — The lesson example $35 + 36$ uses two odd numbers.

d) **Always** — This matches partitioning the numbers into tens and units as taught.

EXTENSION SHEET · STRETCH ANSWERS

S1: 10296

S2: 10129

S3: 11914

S4: 12135

S5: 5529

Investigation: Which strategy wins? — open-ended; scan pupils' working for valid solution paths rather than a single answer.