

Lesson 62 MEASURES

The 24-hour clock – an introduction

WHAT THIS LESSON TEACHES

In the 24-hour clock the hours keep counting from 0 up to 23, so the time does not start again at 1 after midday. Morning times stay the same; for afternoon and evening times you add 12 to the hour.

→ 3 p.m. becomes 15:00 because $3 + 12 = 15$.

→ Half past four in the afternoon is 16:30.

MODEL THIS ON THE BOARD

WRITING 6 P.M. IN 24-HOUR TIME

- 1 The clock shows 6 o'clock. It is 6 p.m., so it is after midday.
- 2 Add 12 to the hour: $6 + 12 = 18$.
- 3 Keep the minutes as **00**. Write **18:00**.



DISCUSSION STARTER

REFLECT When might 24-hour time be clearer than saying o'clock or half past?

ANSWER KEY

a) 9:00 a.m.: 09:00

b) 1:00 p.m.: 13:00

c) 5:30 p.m.: 17:30

d) 11:15 a.m.: 11:15

e) 8:45 p.m.: 20:45

f) 12:00 noon: 12:00

Q1: 08:00

Q2: 13:00

Q3: 16:00

a) **Always** — Morning hours from 00 to 11 are not changed.

b) **Sometimes** — Only afternoon and evening times go above 12; morning times do not.

c) **Always** — Every afternoon or evening p.m. time needs 12 added to its hour.

d) **Never** — The 24-hour clock never uses a.m. or p.m. because the hour tells the time of day.

EXTENSION SHEET · STRETCH ANSWERS

S1: 15:55

S2: 15:55

S3: 1:35 pm ↔ 13:35

S4: 12:45 pm ↔ 12:45

S5: 1:35 pm ↔ 13:35

Investigation: Plan a day out — open-ended; scan pupils' working for valid solution paths rather than a single answer.