



Time Conversions

60 seconds = 1 minute
60 minutes = 1 hour
24 hours = 1 day
7 days = 1 week
365 days = 1 year
12 months = 1 year
10 years = 1 decade
100 years = 1 century

12hr & 24hr Clock

pm times: add 12 to hours

12:00 am → 00:00 (midnight)
12:00 pm → 12:00 (noon)
3:30 pm → 15:30
11:45 pm → 23:45
6:15 am → 06:15

Key Words

Duration: length of time an event takes
Timetable: shows departure/arrival times
am: midnight to noon · pm: noon to midnight
Elapsed time: time between two events
Analogue: clock with hands
Metric: decimal unit system

Calculating with Time

Start 09:45, end 11:20. Duration?

09:45 → 10:00 = 15 min · 10:00 → 11:20 = 80 min ·
15 + 80 = 95 min

Answer: 1 hr 35 min

Film starts 19:35, lasts 2h 40min

19:35 + 2h = 21:35, 21:35 + 40min

Answer: 22:15

Length, Mass & Capacity

Multiply to go to smaller unit: $\text{km} \times 1000 = \text{m}$,
 $\text{m} \times 100 = \text{cm}$, $\text{cm} \times 10 = \text{mm}$; $\text{kg} \times 1000 = \text{g}$, $\text{g} \times 1000 = \text{mg}$;
 $\text{l} \times 1000 = \text{ml}$

Convert 3.5 km to metres

$\times 1000$

Answer: 3 500 m

Convert 450 g to kg

$\div 1000$

Answer: 0.45 kg

Using Timetables

Read down columns for each service.

Station	Train 1	Train 2	Train 3
Town A	08:10	09:15	10:30
Town B	08:35	09:40	10:55
Town C	09:00	10:05	11:20

Train 2: Town A to Town C?

09:15 → 10:05

Answer: 50 min



Converting Units

Multiply $\times$, Divide $\div$

Convert 2.4 m to cm

$\times 100$

Answer: 240 cm

Convert 750 ml to litres

$\div 1000$

Answer: 0.75 l

Convert 1.8 km to metres

$\times 1000$

Answer: 1800 m

Convert 4500 g to kg

$\div 1000$

Answer: 4.5 kg

Estimating & Appropriate Units

Sensible estimates:

Door height $\approx$ 2 m · Bag of sugar $\approx$ 1 kg
Teaspoon $\approx$ 5 ml · Water bottle $\approx$ 500 ml

Answer: Use context

Which unit for the mass of a car:
g, kg or tonnes?

A car is very heavy – too big for g or kg to be practical

Answer: tonnes

Convert 3.2 kg to grams

$\times 1000$

Answer: 3 200 g

Mixed Time Problems

Departs 14:50, journey 1h 25min

14:50+1h=15:50, 15:50+25min

Answer: 16:15

Today is Tuesday 3rd. What day is the 17th?

17-3=14 days later, 14 $\div$ 7=2 whole weeks

Answer: Tuesday

08:15 to 10:05. Duration?

08:15 $\rightarrow$ 10:00=1h45, 10:00 $\rightarrow$ 10:05=5min

Answer: 1h 50min

Try It Yourself!

1. Convert 3:30 pm to 24-hour clock.

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2. Convert 4.5 km into metres.

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3. Convert 2750 g into kg.

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4. Bus leaves 08:45, arrives 10:10. Journey time?

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5. Convert 680 cm into metres.

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6. Convert 1.25 litres into ml.

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7. Film starts 20:15, lasts 1h 50min. End time?

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8. Estimate the height of a door in metres.

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