



Time graphs

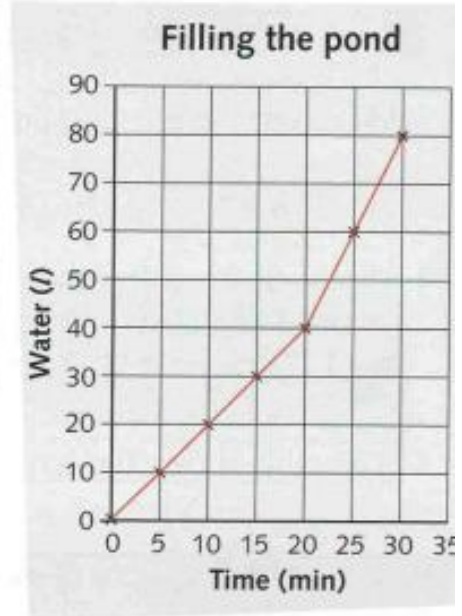
Use coordinates and scales to interpret information in time graphs

Challenge 1

Sharon is filling her pond.

- 1 Copy and complete the table using the information in the graph.
- 2 After how many minutes did Sharon increase the flow of water into the pond?
- 3 Estimate how much water was in the pond after $27\frac{1}{2}$ minutes.

Time (min)	Water (l)
0	0
5	
10	
15	
20	
25	
30	



Challenge 2

The gauges show the levels of diesel in a delivery van's tank during a 7-hour journey.

You will need:

- graph paper
- ruler



1 Copy and complete the table using the data from the eight diesel gauges.

2 Use the data in your table to draw a time graph. Decide on suitable scales for both axes of your graph.

3 Use your graph to answer these questions.

- What is the capacity of the diesel tank?
- How many litres of fuel did the van use in the first 2 hours?
- After how many hours of driving did the driver fill up the tank with diesel?
- The driver bought 44 litres of diesel. What would the diesel gauge have read immediately before she went into a garage for fuel?
- When do you think the driver stopped for her lunch break? Give a reason for your answer.
- Estimate the reading on the diesel gauge after $3\frac{1}{2}$ hours of driving.
- Estimate when the diesel gauge showed these readings:
 - 41 litres
 - 35 litres

Time (h)	Diesel (l)
0	
1	
2	
3	
4	
5	
6	
7	



The table shows the amount of water in a kettle during one afternoon.

You will need:

- graph paper
- ruler

Time (p.m.)	1:00	1:30	2:00	2:30	3:00	3:30	4:00
Water (ml)	450	300	120	600	350	170	50

Use the data in the table to draw a time graph.

Write three questions about the data in your time graph for a partner to answer. Your questions should include asking your partner to make estimates involving times or water levels.

