9. The picture below is of a toy car based on a real model.


The length of the toy car is 6 centimetres.
The scale of the toy car to the real model is:
1 centimetre represents 50 centimetres
Find the actual length of the real model.
10. SQA 2011 Foundation

This is a plan of Gordon's kitchen.

(a) A broken line has been drawn on the plan to show the distance from the fridge to the sink.
NLC N3L Measure this distance.
(b) The scale of the plan is $\mathbf{1}$ centimetre represents $\mathbf{5 0}$ centimetres. Find the actual distance from the fridge to the sink in centimetres.
(c) Write down the actual distance from the fridge to the sink in metres.
11. These patterns are made with circles.


Pattern 1


Pattern 2


Pattern 3
(a) Draw the next pattern.
(b) Complete this table.

| Pattern number | 1 | 2 | 3 | 4 | 5 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Number of circles | 4 | 7 |  |  |  |

(b) How many circles would be needed for Pattern 11?
12. SQA 2013 Foundation

Posters are put on a wall using drawing pins at their corners as shown below.


1 poster
4 drawing pins


2 posters


3 posters

6 drawing pins
(a) Complete the table.

| Number of posters | 1 | 2 | 3 | 4 | 5 | 6 |  | 11 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Number of drawing pins | 4 | 6 |  |  |  |  |  |  |

(b) Write a rule for finding the number of drawing pins if you know the number of posters.
13. SQA 2013 Foundation

The opening times of a Recycling Centre are shown below.

| Recycling Centre Opening Times |  |
| :---: | :---: |
| Summer (April to September) |  |
| Mon - Fri | $0700-2000$ |
| Sat - Sun | $0830-1700$ |
| Winter (October to March) |  |
| Mon - Fri | $0700-1700$ |
| Sat - Sun | $0830-1600$ |

NLC N3L SSM
For how long is the Recycling Centre open on Saturday 9th February?
14. Jen starts watching a move at 6.45 pm .

The movie lasts for 2 hours and 25 minutes.
What time will the movie finish?
15. Michael is going from the city centre to the airport by bus.

The buses run at regular intervals 24 hours a day.
Part of the bus timetable is shown below:

## Bus timetable

| Depart: <br> City centre | 2000 | 2010 | 2020 |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Arrive: <br> Airport | 2025 | 2035 | 2045 |  |  |  |  |  |

(a) Complete the timetable to show the departure and arrival times of the next five buses.
(b) Michael has decided to catch the bus which leaves the city centre at 0930.

What time will he arrive at the airport?
16. The table shows part of the Edinburgh to Aberdeen railway timetable.

| Edinburgh | 0755 | 0935 | 1130 | 1235 | 1420 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Kirkcaldy | 0830 | 1010 | 1205 | 1308 | 1455 |
| Dundee | 0923 | 1106 | 1300 | 1405 | 1602 |
| Aberdeen | 1038 | 1220 | 1415 | 1520 | 1719 |

(a) When does the 1130 train from Edinburgh arrive in Dundee?
(b) How long does this train take to go from Edinburgh to Dundee?
(c) Ellie has to travel from Kirkcaldy to Aberdeen for a meeting at 4 pm .

What is the latest train she can take from Kirkcaldy?

## Answers

$9 \quad 300 \mathrm{~cm}$ or 3 m
10 Use diagram to check
a) check drawing
b) $10,13,16$
c) 34
a) $8,10,12,14,24$
b) $2 \times p o s t e r s+2$
$13 \quad 7$ hours 30 mins
$14 \quad 9.05$ pm
15
a) table
b) 0955

16
a) 1300 or 1 pm
b) 1 hour 30 mins
c) 1308

