Q1. This is what it costs to visit a castle.

Helen is 10 years 9 months old.
How much will it cost Helen to visit?

Allington Castle Cost per person

## Adults

Children
(11 and over)
Children

On one day the number of visitors was

## Adults

4
Children (11 and over) 16

Children (under 11) 12

Here is a graph to show the number of visitors.
Complete the scale for the axis called "Number of Visitors".

How much will it cost for 18 children (under 11) to visit the castle?

You must show your working.



Q2. This calculation has the same number missing from each box. Write the missing number in the boxes.
$\square$
. Here are some picture frame sizes.

| height in cm | 10 | 12 | 14 | 16 |
| :--- | :--- | :--- | :--- | :--- |
| length in $\mathbf{c m}$ | 16 | 20 | 24 | 28 |

For each frame, the length is twice the height, subtract 4


What is the length of a frame which has a height of $\mathbf{3 6} \mathbf{~ c m}$ ?


2 marks
For each frame, the length $(\mathrm{L})$ is twice the height $(\mathrm{H})$, subtract 4
Write this in symbols.

```
L=
```

2 marks
A new frame has its length twice its height.
It is made with 126 cm of wood. What is the length of this frame?


Q4. Boxes measure 2.5 cm by 4.5 cm by 6.2 cm .
The shopkeeper puts them in a tray.


Work out the largest number of boxes which can lie flat in the tray.


2 marks

## Q5.

The Year 6 children in a school were asked to choose a musical instrument.

This is a pie chart of their choices.

Estimate what fraction of the children chose a drum.


There are $\mathbf{8 0}$ children in Year 6. Estimate the number of children who chose a violin.
$\square$
$15 \%$ of the 80 children chose a guitar.
How many children is this?


Q6. Write in the missing digit.

$$
\square 92 \div 14=28
$$

Q7. Write in the missing digits.


Q8. 427 children visit a castle.
They go in groups of 15 One group has less than 15
Every group of children has one adult with them.

How many adults will need to go?

1 mark
Mr Todd buys 7 drinks at 48p each and 8 drinks at 52p each.
What is the total cost of the 15 drinks?


Mark schemes

Q1. (a) $95 p$
(b) All three numbers, 10, 15, 20, in correct position.

(c) Award ONE mark for correct answer of $£ 17.10$ with evidence of any appropriate working out of the answer, eg:

- $(18 \times £ 1)-(18 \times 5 p)=£ 18-90 p=£ 17.10$
- $\begin{array}{r}18 \\ \times 90 \\ \hline\end{array}$
$90 \quad 1620+90=£ \frac{\begin{array}{c}18 \\ \times 5 \\ 17.10\end{array}}{}$
Accept £17.10p OR £17 10 OR £17 10p OR 1710p OR 17.10

Q2.

## Chax 7 [7]

 [6]

Q3. (a) 68 cm .
(b) Award TWO marks for expressions such as:

- $\mathrm{L}=2 \mathrm{H}-4$
- $L=2(H-2)$
- $\mathrm{L}=\mathrm{H}+\mathrm{H}-4$
(c) 42 cm ,

If answer is incorrect, award ONE mark for evidence that the relationship "length is twice the height" has been used, eg:

- $2 \mathrm{H}+4 \mathrm{H}=126$
- $\mathrm{H}+2 \mathrm{H}+\mathrm{H}+2 \mathrm{H}=126$
- $20+40+20+40=120$

Q4. 10 ,

Q5. (a) The answer is approximately $1 / 7$. Accept any fraction, percentage or decimal in the range:

- $1 / 9$ to $1 / 5$, inclusive
- $11 \%$ to $20 \%$, inclusive
- 0.11 to 0.2 , inclusive
(b) The correct answer is 10 . Accept any number in the range 8 to 12 , inclusive.
(d) 12, .

Q6.
$392 \div 14=28$

Q7.

## $323 \times$ 团7 = 1513 回

both numbers correct.

Q8. (a) 29
(b) $£ 7.52$

