Question 1: The bar chart shows information about the hair colour of students in 7C.

(a) What is the most common hair colour in 7C?
(b) How many students had black hair?
(c) What hair colour is the least popular in 7C?
(d) How many more students had brown than red hair?
(e) How many students are in 7C?

Question 2: Nicole recorded the colours of cars in a car park. She then drew a bar chart to show the results.

(a) What is the most common colour of car?
(b) How many cars were blue?
(c) How many cars were white?
(d) How many more cars were red than black?
(e) Why do you think there is a bar called “other”?
(f) How many cars were in the car park?

Question 3: The bar chart shows information about the average temperature on an island.

(a) What was the average temperature in March?
(b) Which month had an average temperature of 26°C?
(c) What is happening to the average temperatures between Jan and July?
(d) Between which two months was there the greatest rise in temperature?
Question 4: The bar chart shows information about the number of ice creams sold in a shop.

(a) How many ice creams were sold on Tuesday?

(b) On which day were the least number of ice creams sold?

(c) Why do you think so many ice creams were sold on Thursday?

(d) On which two days were the same number of ice creams sold?

(e) How many ice creams were sold in total?

Question 5: The dual bar chart shows information about the number of boys and girls in three tutor groups, 7A, 7B and 7C.

(a) How many boys are there in 7B?

(b) Which tutor group has 12 girls?

(c) Which tutor group has more girls than boys?

(d) Which tutor group has the same number of boys and girls?

(e) Which tutor group has the most students?

(f) How many more girls than boys are there in 7A?

(g) How many boys are there in Year 7?

(h) How many students are there in Year 7?

(i) Are there more boys or girls in Year 7?
Question 1: Nigel has asked his friends which country they support in the Six Nations. He has shown the results in a bar chart.

The bar chart is accurately drawn, but Nigel has forgotten to label the frequencies. Nigel does remember that 9 people supported France.

Find the missing frequencies.

<table>
<thead>
<tr>
<th>Rugby Team</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scotland</td>
<td></td>
</tr>
<tr>
<td>England</td>
<td></td>
</tr>
<tr>
<td>Wales</td>
<td></td>
</tr>
<tr>
<td>France</td>
<td>9</td>
</tr>
<tr>
<td>Ireland</td>
<td></td>
</tr>
<tr>
<td>Italy</td>
<td></td>
</tr>
</tbody>
</table>

Question 2: The bar chart shows the ages of children in a youth club.

(a) What is the modal age?
(b) What is the range of the ages?
(c) What fraction of the children are 11?
(d) What percentage of the children are older than 13?
Question 3: Peterborough Pirates are an ice hockey team. They play in a league where a win earns 5 points, a draw earns 2 points and a loss earns −1 points. The bar chart shows information about their results in 2016. The table shows the final points for the other 9 teams in the league. In which position did Peterborough Pirates finish?

![Peterborough Pirates results bar chart]

<table>
<thead>
<tr>
<th>Team</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belfast Giants</td>
<td>50</td>
</tr>
<tr>
<td>Cardiff Devils</td>
<td>23</td>
</tr>
<tr>
<td>Coventry Blaze</td>
<td>49</td>
</tr>
<tr>
<td>Edinburgh Capitals</td>
<td>51</td>
</tr>
<tr>
<td>Manchester Storm</td>
<td>12</td>
</tr>
<tr>
<td>Nottingham Panthers</td>
<td>28</td>
</tr>
<tr>
<td>Sheffield Steelers</td>
<td>55</td>
</tr>
<tr>
<td>Swindon Wildcats</td>
<td>33</td>
</tr>
<tr>
<td>Telford Tigers</td>
<td>32</td>
</tr>
</tbody>
</table>

Question 4: Shown are the ages of 20 friends. Work out the mean age.

![Age frequency bar chart]

To find the mean age, we need to use the formula for the mean:

\[
\text{Mean} = \frac{\sum \text{Frequency} \times \text{Age}}{\sum \text{Frequency}}
\]

We can calculate the mean age using the data from the bar chart as follows:

- Age 18: 5 people, total age is 90
- Age 19: 6 people, total age is 114
- Age 20: 7 people, total age is 140
- Age 21: 2 people, total age is 42
- Age 22: 1 person, total age is 22
- Age 23: 1 person, total age is 23

Total number of people = 20
Total age = 90 + 114 + 140 + 42 + 22 + 23 = 411
Mean age = \(\frac{411}{20} = 20.55\)