1. Morgan, Nate and Oakley record dice scores to find their mode and median score.

Morgan's dice scores: $1 \begin{array}{lllllllllllllllllllllll} & 4 & 2 & 3 & 1 & 3 & 1 & 4 & 4 & 6 & 6 & 3 & 2 & 1 & 3 & 6 & 5 & 1 & 2 & 6 & 6 & 3 & 6\end{array}$
Morgan ordered them: $1 \begin{array}{lllllllllllllllllllll}6 & 1 & 1 & 2 & 2 & 3 & 3 & 3 & 3 & 4 & 4 & 4 & 5 & 6 & 6 & 6 & 6 & 6 & 6 & 6\end{array}$

| Score | Frequency | Morgan's blank column |
| :---: | :---: | :--- |
| 1 | 5 |  |
| 2 | 3 |  |
| 3 | 5 |  |
| 4 |  |  |
| 5 |  |  |
| 6 |  |  |


| Reminder |  |
| :--- | :--- |
| median | middle |
| mode | most |


| Morgans' statistics |  |
| :--- | :---: |
| Mode | Median |
|  |  |

(a) Complete the frequency column of Morgan's frequency table.

Nate recorded his dice scores in the spare column of the table.

| Score | Frequency | Nate's dice score results |
| :---: | :---: | :---: |
| 1 | 5 | 11111 |
| 2 | 3 | 222 |
| 3 | 7 | 3333333 |
| 4 |  | 44444 |
| 5 |  | 555555 |
| 6 |  | 6666 |


| Reminder |  |
| :--- | :--- |
| median | middle |
| mode | most |

(b) Complete the frequency column in Nate's frequency table.

Oakley said "If I record my results like Nate it will be easier to find the median."

| Score | Frequency | Long winded results by Oakley |
| :---: | :---: | :---: |
| 1 | 1 | 1 |
| 2 | 6 | 222222 |
| 3 | 2 | 33 |
| 4 | 1 |  |
| 5 | 3 |  |
| 6 | 2 |  |


| Reminder |  |
| :--- | :--- |
| median | middle |
| mode | most |


| Oakley's statistics |  |
| :---: | :---: |
| Mode | Median |
|  |  |

(c) Complete Oakley's long winded results in Oakley's frequency table.
(d) Complete the mode and median scores for Morgan, Nate and Oakley.
2. The frequency table shows information about the number of children living in each house in Station Road.

| Number of children | Frequency |  |
| :---: | :---: | :--- |
| 0 | 7 |  |
| 1 | 6 |  |
| 2 | 4 |  |
| 3 | 11 |  |
| 4 | 1 |  |
| 5 | 0 |  |
| 6 | 2 |  |

Reminder median middle mode most

| Children in Station Rd |  |
| :---: | :---: |
| Mode | Median |
|  |  |

Complete the mode and median in the table above.
3. The frequency table shows information about the number of buses per day for "Reliability" bus company.

| Number of buses | Frequency |  |
| :---: | :---: | :--- |
| 2 | 4 |  |
| 3 | 7 |  |
| 4 | 8 |  |
| 5 | 1 |  |
| 6 | 0 |  |
| 7 | 0 |  |
| 8 | 1 |  |

Reminder
median middle
mode most
range $=$ big - small
(a) Write down the mode number of buses.
(b) Write down the median number of buses.
(c) Write down the range.

Answers

1 (a) | Score | Freq. |
| :---: | :---: |
| 4 | 3 |
| 5 | 1 |
| 6 | 7 |

(b)

| Score | Freq. |
| :---: | :---: |
| 4 | 5 |
| 5 | 6 |
| 6 | 4 |

(c)

| Score | Freq. | Oakley |  |  |
| :---: | :---: | :--- | :--- | :--- | :--- |
| 4 | 1 | 4 |  |  |
| 5 | 3 | 5 | 5 | 5 |
| 6 | 2 | 6 | 6 |  |

(d) | Name | Mode | Median |
| :--- | :---: | :---: |
| Morgan | 6 | 3 |
| Nate | 3 | 3.5 |
| Oakley | 2 | 3 |

2. Mode $=3$, Median $=2$
3. (a) 4, (b) 3 (c) 6
