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

Morgan's dice scores: 1 4 2 3 1 6 3 1 4 4 6 6 3 2 1 3 6 5 1 2 6 6 3 6

Morgan ordered them: 1 1 1 1 1 2 2 2 3 3 3 3 3 4 4 4 5 6 6 6 6 6 6 6

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

| Reminder | |
|--------------------------------------|--------------------|
| $\mathbf{m}\mathbf{e}\mathbf{d}$ ian | \mathbf{mid} dle |
| \mathbf{mo} de | \mathbf{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 | 1 1 1 1 1 |
| 2 | 3 | 2 2 2 |
| 3 | 7 | 3 3 3 3 3 3 3 |
| 4 | | 4 4 4 4 4 |
| 5 | | 5 5 5 5 5 5 |
| 6 | | 6 6 6 6 |

| Reminder | |
|--------------------|---|
| \mathbf{med} ian | $\mathbf{m} \mathbf{i} \mathbf{d} \mathrm{d} \mathbf{l} \epsilon$ |

mode most

| Nate's statistics | | |
|-------------------|--|--|
| Mode Median | | |
| | | |

(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 | 2 2 2 2 2 2 |
| 3 | 2 | 3 3 |
| 4 | 1 | |
| 5 | 3 | |
| 6 | 2 | |

| \mathbf{T} | | 1 |
|--------------|-------|----------|
| | 0.700 | 0.00 |
| | | aor |

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

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

| | Score | Freq. | |
|----|-------|-------|----|
| b) | 4 | 5 | (, |
| D) | 5 | 6 | 10 |
| | 6 | 4 | |
| | | | |

| | Score | Freq. | Oakley | |
|----|-------|-------|--------|-----|
| | 4 | 1 | 4 | (4) |
| •) | 5 | 3 | 5 5 5 | (u) |
| | 6 | 2 | 6 6 | |

| 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