## Interpreting Frequency Tables

Mr Millar

## Try this

Sam asks 25 students in his year how many siblings they have.

Here are his results:
1, 2, 1, 0, 4, 2, 2, 1, 2, 3, 1, 0, 1, 0, 2, 1, 3, 3,
$6,1,2,3,1,1,0$
Represent the results in a frequency table.

What is the mode and range?

$$
\begin{aligned}
& \text { Number of Tally } \quad \text { Frequency } \\
& \text { Siblings }
\end{aligned}
$$

## Connect

These students are trying to imagine how many siblings there would be in total if everyone brought all their siblings into school.

| Number of <br> Siblings | Fr |
| :--- | :--- |
| 0 | 4 |
| 1 | 9 |
| 2 | 6 |
| 3 | 4 |
| 4 | 1 |
| 5 | 0 |
| 6 | 1 |



## Independent task

Leela asks a sample of 16 of her year how many bottles of water they drink per day.
Here are her results: $4,1,2,3,1,3,4,4,1,3,1,0,2,3,4,3$
Put the following data into a frequency table and find:

- The total number of bottles drunk
- The mode and range

```
Number of Tally Frequency
```

bottles

## Explore

Simon has asked 10 people in his class how many pets they have, but has lost two pieces of data.

Here are the results that he has so far: $0,5,1,2,0,1,2,3$

However, he does know that with all the data included, the total number of pets is 20 and the mode is 2 .

Fill out what you can of the table already, and find out what the missing 2 pieces of data are.

Number of Tally Frequency pets

## 0

12
3
4
5

Answers

## Try this

Sam asks 25 students in his year how many siblings they have.

Here are his results:

|  | 0 | IIIII | 4 |
| :--- | :--- | :--- | :--- |
| $1,2,1,0,4,2,2,1,2,3,7,0,1,0,2,7,3,3$, | 1 | HIIIIII | 9 |
| $6,7,2,3,7,7,0$ | 2 | HIH I | 6 |
|  | 3 | IIII | 4 |
| Represent the results in a | 4 | I | 1 |
| frequency table. | 5 |  | 0 |
|  | 6 | I | 1 |

What is the mode and range?

$$
\begin{aligned}
& \text { Mode }=1 \\
& \text { Range }=6-0=6
\end{aligned}
$$

Number of Tally Frequency
Siblings

## Connect

These students are trying to imagine how many siblings there would be in total if everyone brought all their siblings into school.

```
Number of Frequency
Siblings
```

| 0 | 4 | $0 \times 4=0$ |
| :--- | :--- | :--- |
| 1 | 9 | $1 \times 9=9$ |
| 2 | 6 | $2 \times 6=12$ |
| 3 | 4 | $3 \times 4=12$ |
| 4 | 1 | $4 \times 1=4$ |
| 5 | 0 | $5 \times 0=0$ |
| 6 | 1 | $6 \times 1=6$ |
|  | 25 | 43 |



## Independent task

Leela asks a sample of 16 of her year how many bottles of water they drink per day.
Here are her results: $4,1,2,3,1,3,4,4,1,3,1,0,2,3,4,3$
Put the following data into a frequency table and find:

- The total number of bottles drunk

$$
\begin{aligned}
& \text { Total }=39 \\
& \text { Mode }=3 \\
& \text { Range }=4
\end{aligned}
$$

| Number of <br> bottles Tally Frequency <br> O I 1 |  |  |  |
| :--- | :--- | :--- | :--- |
| 1 | IIII | 4 | $0 \times 7=0$ |
| 2 | II | 2 | $1 \times 4=4$ |
| 3 | IIII | 5 | $2 \times 2=4$ |
| 4 | IIII | 4 | $3 \times 5=15$ |
|  |  |  | $4 \times 4=16$ |
|  |  |  | 39 |

## Explore

Simon has asked 10 people in his class how many pets they have, but has lost two pieces of data.

Here are the results that he has so far: 0, 5, 1, 2, 0, 1, 2, 3

However, he does know that with all the data included, the total number of pets is 20 and the mode is 2.

Fill out what you can of the table already, and find out what the missing 2 pieces of data are.
Number of Tally Frequency pets

| 0 | II | 2 |
| :--- | :--- | :--- |
| 1 | II | 2 |
| 2 | III | 3 |
| 3 | I | 1 |
| 4 | 1 | 1 |
| 5 | I | 1 |

2
3
1

1

The missing two pieces of data are 2 and 4

