## Maths

## Plot a histogram

Miss Parnham

## Plot a histogram

1. The table shows the time taken by students to walk to school.
Complete the table.

| Time <br> (minutes) | Frequency | Class <br> width | Frequency <br> density |
| :---: | :---: | :---: | :---: |
| $0<\mathrm{t} \leq 10$ | 9 |  |  |
| $10<\mathrm{t} \leq 15$ | 12 |  |  |
| $15<\mathrm{t} \leq 20$ | 15 |  |  |
| $20<\mathrm{t} \leq 30$ | 8 |  |  |
| $30<\mathrm{t} \leq 60$ | 6 |  |  |

What is the modal class interval?
2. Mo has drawn a histogram from this data.

What mistake has he made?

| Height (cm) | Frequency | Class <br> width | F.D |
| :---: | :---: | :---: | :---: |
| $0<\mathrm{t} \leq 10$ | 16 | 10 | 1.6 |
| $10<\mathrm{t} \leq 20$ | 24 | 10 | 2.4 |
| $20<\mathrm{t} \leq 40$ | 17 | 20 | 0.85 |
| $40<\mathrm{t} \leq 60$ | 13 | 20 | 0.65 |



## Plot a histogram

3. Complete the table and histogram.

| Weekly TV <br> time <br> (hours) | Frequency | Class <br> width | Frequency <br> density |
| :---: | :---: | :---: | :---: |
| $0<\mathrm{t} \leq 10$ | 5 | 10 | 0.5 |
| $10<\mathrm{t} \leq 15$ | 8 | 5 | 1.6 |
| $15<\mathrm{t} \leq 20$ | 15 |  |  |
| $20<\mathrm{t} \leq 30$ | 2 |  |  |



## Plot a histogram

4. Complete the table and draw a histogram to represent the data.

| Handspan <br> $(\mathrm{cm})$ | Frequency | Class <br> width | Frequency <br> density |
| :---: | :---: | :---: | :---: |
| $0<\mathrm{t} \leq 10$ | 2 |  |  |
| $10<\mathrm{t} \leq 20$ | 9 |  |  |
| $20<\mathrm{t} \leq 25$ | 13 |  |  |
| $25<\mathrm{t} \leq 30$ | 6 |  |  |



Answers

## Plot a histogram

1. The table shows the time taken by students to walk to school.
Complete the table.

| Time <br> (minutes) | Frequency | Class <br> width | Frequency <br> density |
| :---: | :---: | :---: | :---: |
| $0<\mathrm{t} \leq 10$ | 9 | 10 | 0.9 |
| $10<\mathrm{t} \leq 15$ | 12 | 5 | 2.4 |
| $15<\mathrm{t} \leq 20$ | 15 | 5 | 3 |
| $20<\mathrm{t} \leq 30$ | 8 | 10 | 0.8 |
| $30<\mathrm{t} \leq 60$ | 6 | 30 | 0.2 |

What is the modal class interval? $15<\mathrm{t} \leq 20$
2. Mo has drawn a histogram from this data.

What mistake has he made?


## Plot a histogram

3. Complete the table and histogram.

| Weekly TV <br> time <br> (hours) | Frequency | Class <br> width | Frequency <br> density |
| :---: | :---: | :---: | :---: |
| $0<\mathrm{t} \leq 10$ | 5 | 10 | 0.5 |
| $10<\mathrm{t} \leq 15$ | 8 | 5 | 1.6 |
| $15<\mathrm{t} \leq 20$ | 15 | 5 | 3 |
| $20<\mathrm{t} \leq 30$ | 2 | 10 | 0.2 |

## Plot a histogram

4. Complete the table and draw a histogram to represent the data.

| Handspan <br> $(\mathrm{cm})$ | Frequency | Class <br> width | Frequency <br> density |
| :---: | :---: | :---: | :---: |
| $0<\mathrm{t} \leq 10$ | 2 | 10 | 0.2 |
| $10<\mathrm{t} \leq 20$ | 9 | 10 | 0.9 |
| $20<\mathrm{t} \leq 25$ | 13 | 5 | 2.6 |
| $25<\mathrm{t} \leq 30$ | 6 | 5 | 1.2 |



