Histograms

1 The table gives information about the ages of children at a nursery.

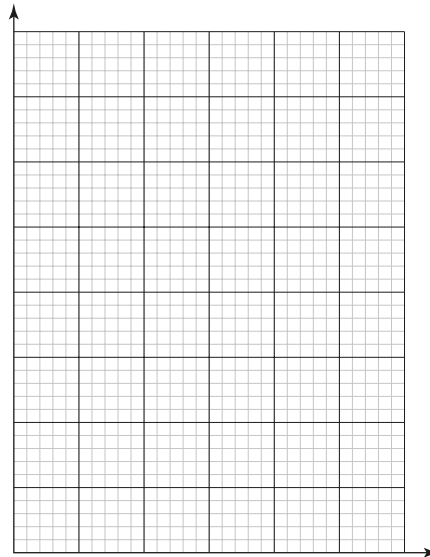| Age (*a* years)	Frequency
$0 < a \leq 0.5$	8
$0.5 < a \leq 1$	12
$1 < a \leq 2$	16
$2 < a \leq 3$	30
$3 < a \leq 5$	28

Draw a histogram for the information shown in the table. (4 marks, ★★★★)
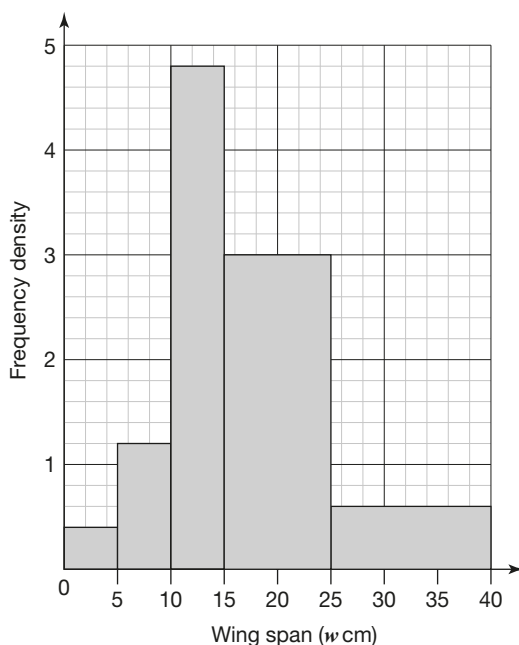
> **NAILIT!**
>
> In histograms with class intervals of different widths, frequency density is plotted on the vertical axis. The area of each bar, not the height, represents the frequency.
>
> Frequency (area of bar) = class width (width) × frequency density (height)

> Work out the frequency density for each class.

2 The table and histogram show information about the wingspan of canaries in an aviary.

Use the histogram to complete the table. (3 marks, ★★★★)

Wingspan (*w* cm)	Frequency
$0 < w \leq 5$	
$5 < w \leq 10$	6
$10 < w \leq 15$	24
$15 < w \leq 25$	30
$25 < w \leq 40$	