## WorkSHEET 8.2 Collecting and organising data

Name:

1 The scores below show the number of students absent each day over a four-week period from a Maths class.

| 5 | 2 | 1 | 0 | 4 | 3 | 2 | 1 | 0 | 1 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 0 | 1 | 2 | 2 | 4 | 3 | 2 | 0 | 0 | 4 |

Display the results in a frequency table.

2 For the data in question $\mathbf{1}$ draw a frequency histogram and polygon.

3 The following data set represents the masses (in kg ) of the 24 jockeys at last year's Melbourne Cup. These data will be used in the next 3 questions.
$\{50,51,51,52,52,52,52,53,53,53,54,54$, $54,54,54,54,55,55,55,56,56,56,57,58\}$

From these data construct a frequency and relative frequency table.

4 Using the data from question 3 , construct a histogram.

5 The table below shows the number of cars that are garaged each night in a particular street.

| Number of cars | 1 | 2 | 3 | 4 | 5 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Frequency | 15 | 26 | 41 | 18 | 5 |

Display the results in a frequency histogram and polygon.

6 Copy and complete the grouped frequency table.

| Class | Classcentre | Frequency |
| :---: | :---: | :---: |
| $1-5$ | 3 | 5 |
| $6-10$ |  | 7 |
|  | 13 |  |
| $16-20$ |  | 15 |
|  | 23 | 2 |

Total $=40$
$7 \quad$ The figures below show the amount of rainfall in millimetres that fell at a particular weather station each day during June.

| 12 | 13 | 25 | 5 | 32 | 22 | 24 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 52 | 0 | 2 | 0 | 19 | 20 | 28 |
| 14 | 28 | 12 | 10 | 47 | 15 | 36 |
| 0 | 5 | 8 | 15 | 27 | 40 | 55 |
| 31 | 45 |  |  |  |  |  |

Use a class size of 10 to display the data in a frequency table.
$8 \quad$ Display the data in question 7 in a frequency histogram and polygon.

9 The following list represents the scores on a recent maths examination for 35 students.
$56,58,23,59,81,32,55,90,75,63,45,78$, $59,62,77,73,82,59,92,56,51,67,73,79$, $61,38,27,59,93,98,54,62,71,80,80$

By forming class intervals of 10 , construct a frequency table.

10 Using the results from question 9, construct a combined histogram and frequency polygon.

