Name $\qquad$ Class $\qquad$

Table 1 shows the heights of a class of students. In Table 2, the heights have been divided into groups, $150-154 \mathrm{~cm}, 155-159 \mathrm{~cm}$ etc.

| Heights of class $8 \mathrm{~b}(\mathrm{~cm})$ |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| 160 | 161 | 169 | 183 | 152 |
| 169 | 180 | 151 | 159 | 172 |
| 174 | 187 | 167 | 177 | 177 |
| 155 | 164 | 166 | 168 | 170 |
|  | 160 |  |  |  |

Table 1

| Height groups (cm) | Number of pupils in each <br> height group |
| :---: | :---: |
| $150-154$ | 2 |
| $155-159$ |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

Table 2

1 Use the information in Table 1 to complete Table 2.
2 Draw a bar chart to show this information. Label the axes.
3 a What shape is your chart overall?
b What sort of distribution does your chart show?
4 a Which type of variation do the heights show; continuous or discontinuous?
b How can you tell this?
c Name one human feature which shows the other type of variation.
5 What do you think is responsible for how tall a person grows?

## knowledge, numeracy

