

Data Collection 1D

- 1 a **Quantitative** as heights are numerical.
- b **Qualitative** as colours are not numerical.
- c **Quantitative** as time is numerical.
- d **Quantitative** as shoe size is numerical.
- e **Qualitative** as names are not numerical.
- 2 a **Discrete** – you cannot have a shoe size of 4.78, for example.
- b **Continuous** – you can measure the length of a leaf to any degree of accuracy.
- c **Discrete** – you can only have whole numbers of people.
- d **Continuous** – you can measure the weight of the sugar to any degree of accuracy.
- e **Continuous** – you can measure the time taken to any degree of accuracy.
- f **Continuous** – you can measure the lifetime of a battery to any degree of accuracy.
- 3 a It is descriptive rather than numerical.
- b It is discrete because you can only have whole numbers of pupils in a class. It is quantitative as it is numerical.
- c Weight can take any value in a given range. Therefore, it is continuous. It is quantitative as it is numerical.
- 4 a 1.4 and 1.5. There are no gaps, therefore the boundaries are the given boundaries of the class.
- b
$$\frac{1.3+1.4}{2} = \frac{2.7}{2} = 1.35 \text{ kg}$$
- c $1.3 - 1.2 = 0.1 \text{ kg}$