Solutions

Award method and answer marks as indicated; accept equivalent correct methods.

2.1

- Siblings are counted: **discrete**. Height is measured: **continuous**.

2.2

- Count occurrences: **1: 3; 2: 4; 3: 1**. Total is 8.

2.3

- $f = 2(5) + 3 = \mathbf{13}$.

2.4

- $N = 18 + 22 = 40$; other column $f = 40 - 17 = \mathbf{23}$.

3.1

(a)

- **Boys: cycle 9, walk 6, total 15; girls: cycle 7, walk 8, total 15; column totals 16, 14, 30**.

(b)

- $N = 9 + 7 + 6 + 8 = \mathbf{30}$.

(c)

- Girls total $G = 15 + 3 = \mathbf{18}$; walk total $W = 14 + 3 = \mathbf{17}$.

3.2

(a)

- Year totals are **20 and 20**.
- Bus and walk totals are **21 and 19**.
- Complete the labelled table with grand total **40**.

(b)

- Travel method is **categorical**.
- Sibling count is **discrete**.
- Journey time is **continuous**, because intermediate times are possible despite rounding the displayed reading.

3.3

(a)

- **Discrete**: goals are counted in whole numbers.

(b)

- **Categorical**: colours are names, not numbers.

(c)

- **Continuous**: mass is measured and can take any value in a range.

3.4

- Boys packed lunch $= 26 - 14 = 12$; girls total $= 50 - 26 = 24$; girls hot meal $= 24 - 9 = 15$.
- Column totals: hot meal $14 + 15 = \mathbf{29}$, packed lunch $12 + 9 = \mathbf{21}$; missing cells **12**, **15**, **24**.