## Line Graphs and Tables

Table and line graph a

| Time | Distance Travelled <br> (miles) |
| :--- | :--- |
| 8:00 a.m. | 0 |
| 8:30 a.m. | 30 |
| 9:00 a.m. | 60 |
| 9:30 a.m. | 60 |
| 10:00 a.m. | 85 |
| 10:30 a.m. | 118 |

Table and line graph b

| Age | Height in cm |
| :--- | :--- |
| Aged 3 years | 95 |
| Aged 4 years | 100 |
| Aged 5 years | 109 |
| Aged 6 years | 115 |
| Aged 7 years | 120 |
| Aged 8 years | 130 |

## Arithmetic

$1.48 \div 8$
2. $9,017+1,000$
3. $63 \div 10$
4. $5 \times 7$

## Practice: Line Graphs

5. Recap: Which axis is the $x$-axis and which axis is the $y$-axis?
6. Label the $x$ and $y$ axes on line graph a.
7. Complete line graph a to show the information in the table.
8. a. At what time did the vehicle stay still for 30 minutes? b. How far did it travel between 8 and 10:30am?
9. Label the $x$ and $y$ axes on line graph $b$.
10. Explain how you decided on the scale to use for table a.
11. Complete line graph $b$ to show the information in the table.
12. a. Between which ages did Tommy grow the most?
b. How much did Tommy grow between age 5 and 7 ?
13. In table a, the total distance travelled was 353 miles. Is this correct? Explain.
14. Create a story for table a/ line graph a.

## Answers

| Q no. | Question | Answer |
| :---: | :---: | :---: |
| 1 | $48 \div 8$ | 6 |
| 2 | 9,017 + 1,000 | 10,017 |
| 3 | $63 \div 10$ | 6.3 |
| 4 | $5 \times 7$ | 35 |
| 5 | Which axis is the $x$-axis and which axis is the $y$-axis? | The $x$-axis is the horizontal axis. The $y$-axis is the vertical axis. |
| 6 | Label the $x$ and $y$ axes on line graph a. | x - Time, y - Distance travelled (miles) |
| 7 | Complete line graph a to show the information in the table. | Correctly drawn. |
| 8 | Questions about line graph a. | a. 9am, b. 118 miles |
| 9 | Label the x and y axes on line graph b. | x-Time, y-Height (cm) |
| 10 | Complete line graph $b$ to show the information in the table. | Answers will vary depending on the scale choice. Most pupils will have chosen a scale with intervals of 10 or 20 as most of the data points are multiples of ten. |
| 11 | Complete line graph $b$ to show the information in the table. | Correctly drawn. |
| 12 | Questions about line graph b. | a. between 7 and 8 years old ( 10 cm ), b. 11 cm |
| 13 | In table a, the total distance travelled was 353 miles. Is this correct? Explain. | The total of 353 miles has been found by adding all the distances together. This is incorrect and shows a misunderstanding of line graphs. This answer shows that the pupil believes each point on the line graph is a discrete set of data, not continuous. |
| 14 | Create a story for table a/ line graph a. | Answers will vary. Pupils should note that the vehicle stopped for half an hour. |

