## Extra Challenge

I can use simple formulae to answer algebraic word problems.
speed per hour $=$ distance $\div$ time in hours
time in hours $=$ distance $\div$ speed per hour
distance $=$ speed per hour $\times$ time in hours

Use these formulas to calculate the answers to these problems:

| Kasia drives her car 120 km in 1.5 hours. |
| :--- | :--- |
| What is her average speed in km per hour? | | Oliver skateboards with a constant speed of |
| :--- |
| 16 miles per hour. How long will he take to |
| travel 32 miles? |

## Extra Challenge Answers

| Kasia drives her car 120 km in 1.5 hours. What is her average speed in km per hour? <br> distance $\div$ time $=$ speed <br> $120 \mathrm{~km} \div 1.5$ hours $=80 \mathrm{~km} / \mathrm{h}$ | Oliver skateboards with a constant speed of 16 miles per hour. How long will he take to travel 32 miles? <br> distance $\div$ speed $=$ time <br> 32 miles $\div 16 \mathrm{mph}=2$ hours |
| :---: | :---: |
| Bana rides her bike with a constant speed of 14 miles per hour. How long will she take to travel 42 miles? <br> distance $\div$ speed $=$ time <br> 42 miles $\div 14 \mathrm{mph}=3$ hours | A helicopter flies with a constant speed of $108 \mathrm{~km} / \mathrm{h}$. How far can it travel in 1 hour 30 minutes? <br> speed $\times$ time $=$ distance <br> $108 \mathrm{~km} / \mathrm{h} \times 1.5$ hours $=162 \mathrm{~km}$ |
| Adnan rides his scooter with a constant speed of $12 \mathrm{~km} / \mathrm{h}$. How far can he travel in 2 hours 45 minutes? <br> speed $\times$ time $=$ distance <br> $12 \mathrm{~km} / \mathrm{h} \times 2.75$ hours $=33 \mathrm{~km}$ | An aeroplane flies 1250 km in 1 hour 15 minutes. What is its average speed in km per hour? <br> distance $\div$ time $=$ speed <br> $1250 \mathrm{~km} \div 1.25$ hours $=1000 \mathrm{~km} / \mathrm{h}$ |

