## 7K2b- Speed, Velocity and Acceleration

1. Write down below the equation for speed, along with the rearrangements of that equation to give distance and time.
Speed =
Distance $=$
Time $=$
2. Speed Calculations.
(a) A person walks quickly across the school field. They cover a distance of 400 m in a time of 3 minutes. What is their speed in $\mathrm{m} / \mathrm{s}$ ?
(b) A car travels along the road at $13.5 \mathrm{~m} / \mathrm{s}$. How far does the car travel in a time of 30 s ?
(c) An aeroplane travels at $200 \mathrm{~m} / \mathrm{s}$. How long does it take to do the journey of 720 km from London to Geneva in Switzerland?
(d) Estimate the distance that you could walk in a quarter of an hour.
3. Speed is a measure of the $\qquad$ travelled by an object in a certain amount of time. It is measured in units called $\qquad$ _.
Velocity is speed in a given $\qquad$ . Speed is a $\qquad$ quantity while velocity is a $\qquad$ _.
If an object is accelerating, that means its $\qquad$ is changing. It could be speeding up, slowing down or changing $\qquad$ .
