2.1: Distance, speed and acceleration

<u>Speed</u>

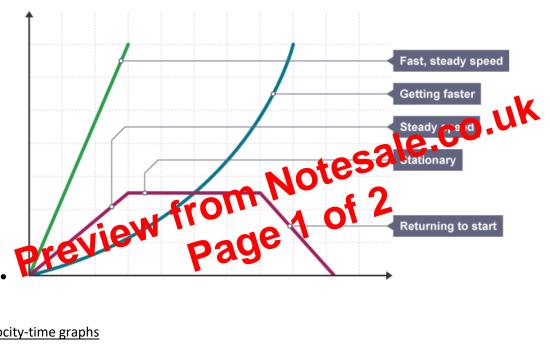
- scalar (non-directional)
- speed = $\frac{\text{distance}}{\text{time}}$; $s = \frac{d}{t}$

Velocity

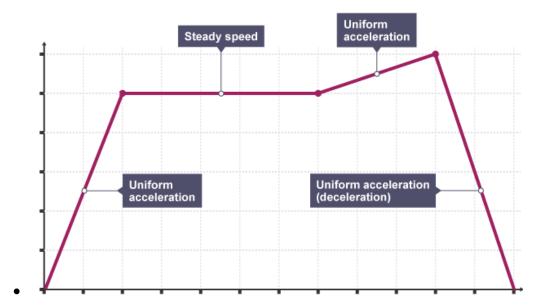
- vector (directional)
- velocity = $\frac{\text{displacement}}{\text{time}}$; $v = \frac{s}{t}$

Acceleration

• acceleration =
$$\frac{\text{change in velocity}}{\text{time}}$$
; $a = \frac{\Delta v}{t}$



Velocity-time graphs



Distance-time graphs