

Modelling Motion

Scalar	quantity with just magnitude	
e.g. Distance	total length, disregarding direction (SI Unit:m)	.
e.g. Speed	a rate showing change of distance with time (SI Unit:m/s)	speed = distance travelled/time taken
Vector	quantity with both magnitude and direction	
e.g. Displacement	distance moved <i>with</i> direction, measure of change of position (SI Unit:m)	displacement 'x' = final position - initial position
e.g. Velocity	rate of change of displacement with direction (SI Unit:m/s)	direction can be given as '+' or '-' in a straight line, otherwise velocity requires a direction

Motion Graphs

Distance-time graph	Graph depicting total distance travelled over time	gradient = speed (object at rest does not have to be at a distance of zero)
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Distance-Time Graph



