

airliner	250 m/s
high speed train	90 m/s
commuter train	55 m/s
motorway speed limit	31 m/s
ferry	18 m/s
speed limit in towns	10.5 m/s
cycling	6 m/s
walking	1.4 m/s

SCAN ME



Final assessment

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Review of learning

Retrieve:
 SP4 wave speeds
 SP7 circular motion
 SP9 vector diagrams
 +16 Displacement time graphs, SUVAT equations of motion, projectile motion

force, weight, magnitude, vector/scalar quantities, displacement, acceleration, instantaneous speed, velocity./time graphs

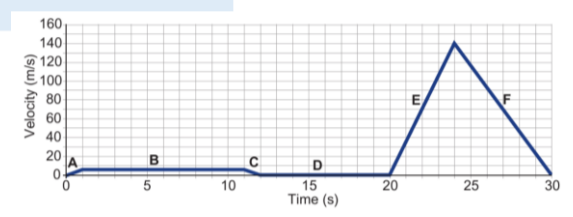
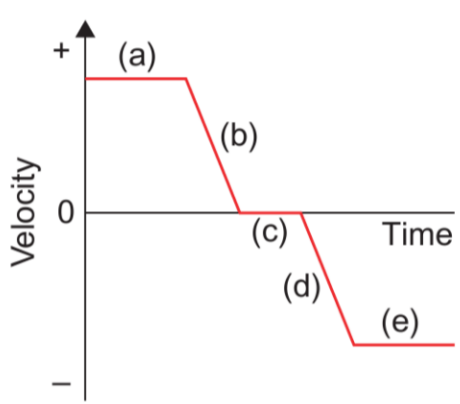
Revision

Retrieval, keyword definitions and equation practice.

Typical Speeds

Investigate typical walking, jogging and running speeds

Calculate distance using the area under a V/T graph



Velocity/time graph

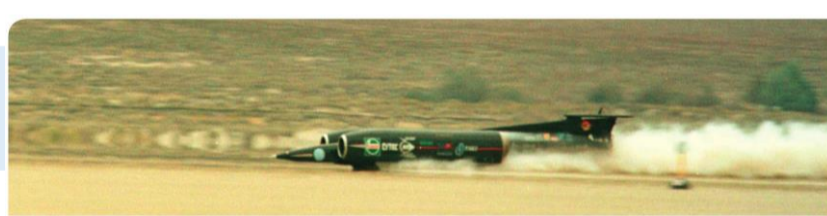
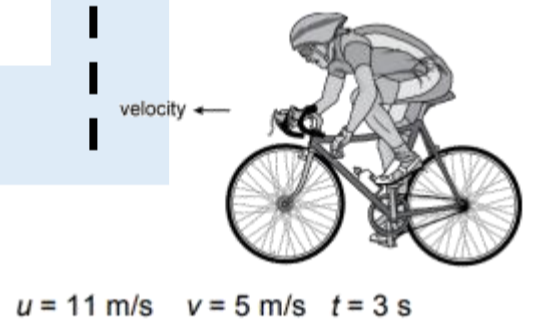
Comparing accelerations on velocity/time graph and using them to work out the total distance travelled

$$a = \frac{v - u}{t}$$

Acceleration

How are acceleration, initial velocity, final velocity and distance related?

negative acceleration = slowing down

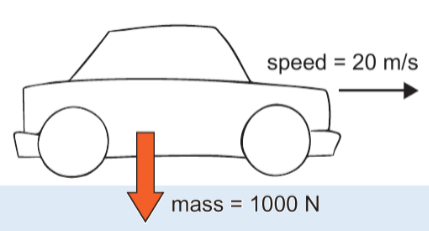


Gradient
 Steeper line = faster

Distance/time graphs

How to represent journeys on a distance/time graph

calculate speed using a D/T graphs gradient



LESSON 1

Vectors and Scalars

What are vector and scalar quantities

$$s = v \times t$$

Vector or scalar?

Retrieve:
 P1.1 Forces
 P1.5 Balance forces
 P2.5 Echoes
 P1.4 Motion of celestial bodies
 P2.3 Motion and pressure

Make sure you can write definitions for these key terms.

