



Key Stage 3 progress grid

Subject Science **Year** 9

Topic / skill area Terminal Velocity

Trajectory	I am able to.....
T9, T8	<input type="checkbox"/> Fully link the size of the forces to the velocity of the parachutist at all 6 stages of his journey using all the keywords suggested
T7	<input type="checkbox"/> Link surface area and forces to explain why the second terminal velocity is lower <input type="checkbox"/> Link resultant forces to how velocity changes at each stage of the parachutist's journey
T6	<input type="checkbox"/> Discuss the resultant forces at each stage of the parachutist's journey <input type="checkbox"/> Compare the forces at each terminal velocity to explain the different values <input type="checkbox"/> Explain air resistance in terms of particles
T5, T4	<input type="checkbox"/> Describe and explain at which stages forces are balanced <input type="checkbox"/> Describe and explain at which stages the forces are unbalanced <input type="checkbox"/> Draw force arrows that show the relative size and direction of the forces when the parachutist is speeding up <input type="checkbox"/> Draw force arrows that show the relative size and direction of the forces when the parachutist is slowing down
T3	<input type="checkbox"/> Describe the effect of opening the parachute on velocity <input type="checkbox"/> State at which stages the parachutist is speeding up, slowing down and falling at a constant speed <input type="checkbox"/> State the two different values of terminal velocity the parachutist achieves <input type="checkbox"/> Label the forces correctly on the diagram of the parachutist
T2, T1	<input type="checkbox"/> Draw a diagram showing where some forces might act on the parachutist <input type="checkbox"/> State the velocity/ speed of the parachutist at one of the stages in his journey <input type="checkbox"/> State at stage where the parachutist is speeding up or slowing down

