Forces 2: Velocity and acceleration (OEOO13) – Revision Checklist

I can...	Lesson	Revised?
State whether speed is a scalar or vector quantity	OEOO13 LE1	
Recall typical speeds for walking, cycling and running.	OEOO13 LE1	
Recall typical speeds for different types of transportation	OEOO13 LE1	
Describe factors that affect the speed at which a person can run, walk or cycle	OEOO13 LE1	
Give examples of objects or phenomena that also have varying speed.	OEOO13 LE1	
Recall a typical value for the speed of sound in air	OEOO13 LE1	
Measure the distance travelled and the time taken for an object	OEOO13 LE1	
Calculate speed, using the speed equation	OEOO13 LE1	
Calculate time or distance, using the speed equation.	OEOO13 LE1	
Explain, using ideas of forces, why an objects speed changes.	OEOO13 LE1	
Calculate the average speed for non-uniform motion	OEOO13 LE1	
Define velocity and state whether it is a scalar or vector quantity	OEOO13 LE3	
Explain the distinction between speed and velocity, and between distance and displacement	OEOO13 LE3	
(HT) Explain why motion in a circle involves constant speed but changing velocity	OEOO13 LE3	
Describe what a distance–time graph represents for an object moving in a straight line	OEOO13 LE2	
Calculate speed from the gradient of a distance–time graph	OEOO13 LE2	
Draw distance–time graphs from measurements	OEOO13 LE2	
Extract and interpret information from distance–time graphs	OEOO13 LE2	
Translate information between graphical and numerical form for distance–time graphs	OEOO13 LE2	
(HT) Determine the speed of an accelerating object at a specific time by drawing a tangent on a distance–time graph	OEOO13 LE2	
Define deceleration	OEOO13 LE4	
Estimate the magnitude of everyday accelerations	OEOO13 LE4	
Calculate acceleration from the gradient of a velocity–time graph	OEOO13 LE4	
Draw velocity–time graphs from measurements	OEOO13 LE4	
Interpret lines and slopes of velocity–time graphs to determine acceleration	OEOO13 LE4	
(HT) Calculate distance travelled or displacement from the area under a velocity–time graph	OEOO13 LE5	
(HT) Interpret enclosed areas in a velocity–time graph to determine distance or displacement	OEOO13 LE5	
(HT) Measure the area under a velocity–time graph by counting squares	OEOO13 LE5	
Recall the acceleration due to gravity near the Earth's surface	OEOO13 LE6	
Use the equation acceleration = change in velocity/time	OEOO13 LE6	
Define uniform acceleration	OEOO13 LE7	
Define non-uniform acceleration	OEOO13 LE7	
Use the equation: $v^2 - u^2 = 2as$	OEOO13 LE7	
Describe the motion of an object falling through a fluid, including how forces change until terminal velocity is reached	OEOO13 LE8	
Draw and interpret velocity–time graphs for objects that reach terminal velocity	OEOO13 LE8	
Interpret the changing motion of a falling object in terms of the forces acting on it	OEOO13 LE8	
Use the equation kinetic energy = 0.5 x mass x speed^2	OEOO13 LE9	

| Use the equation: elastic potential energy = 0.5 x spring constant x extension^2 | OEOO13 LE10 | |