

Exasperated by the emotional roller coaster that Bella's latest tribulations have evoked in him, Albert slams his copy of *Twilight* down onto the table and emphatically pushes it away from him.

The book has mass 2kg and initial velocity 2m/s away from Albert. Friction from the table exerts a 2N force on the book (in the opposite direction to the velocity). Fill in the table below to predict the future positions and velocities of the book:

	POSITION	VELOCITY
time 0 :	value <input style="width: 100px; height: 30px;" type="text" value="0m"/>	value <input style="width: 100px; height: 30px;" type="text" value="2m/s"/>
	rate of change : <input style="width: 100px; height: 30px;" type="text"/>	<input style="width: 100px; height: 30px;" type="text"/>
	↓	↓
	change from 0s → 0.1s : <input style="width: 100px; height: 30px;" type="text"/>	<input style="width: 100px; height: 30px;" type="text"/>
time 0.1s	value ↙ <input style="width: 100px; height: 30px;" type="text"/>	value ↙ <input style="width: 100px; height: 30px;" type="text"/>
	rate of change : <input style="width: 100px; height: 30px;" type="text"/>	<input style="width: 100px; height: 30px;" type="text"/>
	↓	↓
	change from 0.1s → 0.2s : <input style="width: 100px; height: 30px;" type="text"/>	<input style="width: 100px; height: 30px;" type="text"/>
time 0.2s	value ↙ <input style="width: 100px; height: 30px;" type="text"/>	value ↙ <input style="width: 100px; height: 30px;" type="text"/>

rate of change of position = velocity

rate of change of velocity = $\frac{\text{force}}{\text{mass}}$

change = rate of change × elapsed time