

Question number	Answer	Notes	Marks
9 (a)	C (longitudinal waves)		1
(b)	<p>FIVE marking areas –</p> <p>Reference to speed = distance travelled ÷ time taken;</p> <p>Measuring a time (of travel) for a known distance / measuring distance for a known time (of travel);</p> <p>Further appropriate detail for making a measurement;</p> <p>Idea of repeats / averaging / range of values;</p> <p>Realistic values for experiment to work suggested;</p>	<p>ACCEPT points made on a labelled diagram</p> <p>Need not be explicit, could be through description, e.g. 'and then divide the 100m by the time measured'</p> <p>examples –</p> <p>'stand a known distance away from a wall and time how long it takes for an echo to come back'</p> <p>'put two microphones on a bench connected to a CRO to measure the time it takes for a sound to go from one microphone to the other'</p> <p>stand at opposite sides of a room and time how long it takes for sound to go across'</p> <p>examples –stating suitable equipment and some indication of how to use it, e.g.</p> <p>'have your partner facing away from you and start the timer when you make a sound – when they hear the sound they turn round and you stop the timer'</p> <p>Details of ALL relevant measurements NOT required, just one example</p> <p>e.g. – realistic –</p> <p>'have your partner stand 100m away'</p> <p>'stand 50m from a wall...time echo'</p> <p>'place two microphones 1m apart...'</p>	5