

Question Number	Answer	Mark
16a	<p>Idea that when waves rise from 900 m depth they speed up Or indication that speed at 700m is greater than at 900m (1)</p> <p>Curving is due to the change in speed being gradual Or not a sudden change in direction as there is no sudden change in speed. (1)</p> <p>Waves are refracted away from the normal (1)</p> <p>Angle of incidence reaches/exceeds the critical angle (at 700m) Or angle of refraction becomes 90° (at 700m) (1)</p> <p>(At 700 m, total internal) reflection takes place (allow TIR) (1)</p>	5
16b	<p>Path in diagram B is a longer (distance) Or straight line path is a shorter (distance) (1)</p> <p>Sound waves travel faster on path in diagram B Or sound waves travel slower on straight line path Or sound waves travel faster at 700m than at 900m (1)</p>	2
16c	<p>Any two from:</p> <p>(Change in) temperature in the sea (1)</p> <p>(Change in) pressure in the sea (1)</p> <p>(Change in) density/salinity of the sea (1)</p>	2
Total for question 16		9