Question Number	Answer		Mark
15(a)	Change of direction (of a ray of light) Due to change in speed/density/medium/material/RI (MP1 – do not allow "bending", but allow "deviation")	(1) (1)	**2**
15(b)	Use of trigonometry to correctly determine either i or r Use of $n_1 \sin \theta_1 = n_2 \sin \theta_2$ using calculated angles Refractive index = 1.3 (MP1 – Need to see working shown, as the r angle from the diagram is close to 43° with a protractor) (MP2 – Award if using $n = \sin i / \sin r$) (MP2 – Both angles need to be correct to award this mark) <u>Example of calculation</u> Tan i = (1.8 cm / 3.0 cm), i = 31° Tan r = (3.7 cm / 4.0 cm), r = 43° $n_1 \sin \theta_1 = n_2 \sin \theta_2$ so $n_1 \sin 31° = 1.00 \sin 43°$ n_1 = 1.32	(1) (1) (1)	**3**
	Total for Question 15		**5**