Question number	Answer	Notes	Marks
11 (a)	idea that (large number of) molecules moving randomly; idea of equal rate of collisions in each direction;	allow atoms or particles **for 'molecules'** can be acquired from diagram by showing arrows of different lengths (by eye) or different directions (by eye) condone idea of equal number in each direction	2
(b)	evaluation of new volume; substitution into $p_1V_1 = p_2V_2$; rearrangement; evaluation of new pressure; e.g. V_2 = (130 × 5.0/8.4 =) 77 (cm^3) 100 × 130 = p_2 × 77 (p_2 =) 100 × 130/77 (p_2 =) 170 (kPa)	ecf different yet incorrect volume -1 POT error **allow 77.38…** allow any value that rounds to 170 (kPa)	4

Total for Question 11 = 6 marks