Question Number	Answer		Mark
14(a)	Uses $R = V/I$ for resistor **Or** uses potential divider	(1)	
	Uses $R = V/I$ for thermistor	(1)	
	R for thermistor = 19 Ω	(1)	
	Temperature = 32 - 36°C	(1)	**4**
	<u>Example of calculation</u> $R = V/I$, $I = V/R$ (for resistor), I = (3.42 V) / (11.5 Ω) = 0.297 A $R = V/I$ (for thermistor) = (9.00 – 3.42 V) / (0.297 A) = 18.8 Ω		
14(b)	Increased e.m.f. leads to greater current	(1)	
	(Increased current leads to) greater temperature	(1)	
	Resistance of thermistor would decrease	(1)	
	(The proportion of the total p.d. across thermistor would decrease so) voltmeter reading would more than double so student incorrect	(1)	**4**
	(For MP4 there needs to be a clear conclusion that the student is incorrect)		
	Total for question 14		**8**