Question Number	Answer		Mark
12a	Ammeter in series with cell and an external component with resistance	(1)	
	Voltmeter parallel with cell	(1)	
	Variable resistor included in circuit	(1)	**3**
12b	(Uses conservation of energy to) obtain the equation $\varepsilon = V + Ir$	(1)	
	Compares $\varepsilon = V + Ir$ with $y = mx + c$	(1)	
	e.m.f. is the y-intercept of the graph	(1)	
	Internal resistance is the negative of the gradient	(1)	**4**
	Total for question 12		**7**