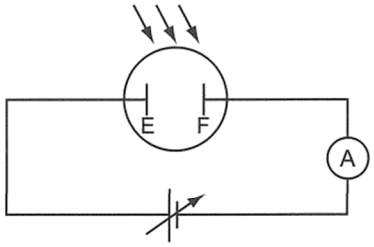
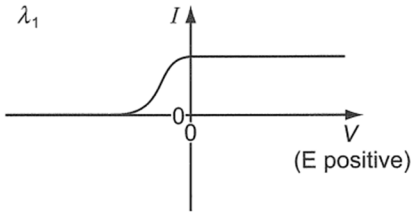
36 The diagram shows a circuit used for photoelectric emission experiments.



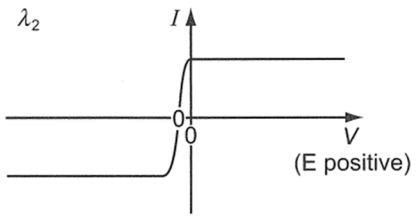
The two electrodes E and F are made of different metals. The work function of electrode E is ϕ_E, and the work function of electrode F is ϕ_F.

Current-voltage (I–V) characteristics are obtained when both electrodes are illuminated with monochromatic light.

When the wavelength of the light is λ_1 the I–V characteristic is as shown.



When the wavelength of the light is λ_2 the I–V characteristic is as shown.



Which line of the table relates the magnitudes of the wavelengths and the magnitudes of the work functions?

	wavelength	work function
A	λ_1 is less than λ_2	ϕ_E is less than ϕ_F
B	λ_1 is less than λ_2	ϕ_E is greater than ϕ_F
C	λ_1 is greater than λ_2	ϕ_E is less than ϕ_F
D	λ_1 is greater than λ_2	ϕ_E is greater than ϕ_F