

37 The equation $hf = \phi + \frac{1}{2}mv_{\text{max}}^2$ is used when studying the photoelectric effect.

What is the meaning of each term in this equation?

	hf	ϕ	$\frac{1}{2}mv_{\text{max}}^2$
A	the energy of a photoelectron	the least energy required to release an electron	the maximum kinetic energy of a photon
B	the energy of a photoelectron	the work done by an incoming photon	the maximum kinetic energy of a photoelectron
C	the energy of a photon causing the photoelectric effect	the least energy required to release an electron	the maximum kinetic energy of a photoelectron
D	the energy of a photon causing the photoelectric effect	the work done by an incoming photon	the maximum kinetic energy of a photon