

- 27** When electrons with velocity v travel through a vacuum and are incident on a thin carbon film, they produce a pattern of concentric circles on the fluorescent screen.

What causes the pattern and how would the pattern change when the velocity v is decreased?

	cause	change to pattern
A	refraction	diameters of circles decrease
B	refraction	diameters of circles increase
C	diffraction	diameters of circles decrease
D	diffraction	diameters of circles increase

- 28** Light of wavelength $\lambda = 0.5 \times 10^{-10}$ m falls on the surface of a metal. The work function of the metal is