

- 29** Electron diffraction from a crystal occurs when the wavelength of the electrons is comparable to the atomic spacing of the atoms in the crystal. Atomic spacing is about  $10^{-10}$  m.

Free electrons are accelerated from rest by a potential difference  $V$  in a vacuum before being incident onto the crystal.

What would be a suitable value for  $V$ ?

**A** 1 mV

**B** 1 V

**C** 1 kV

**D** 1 MV