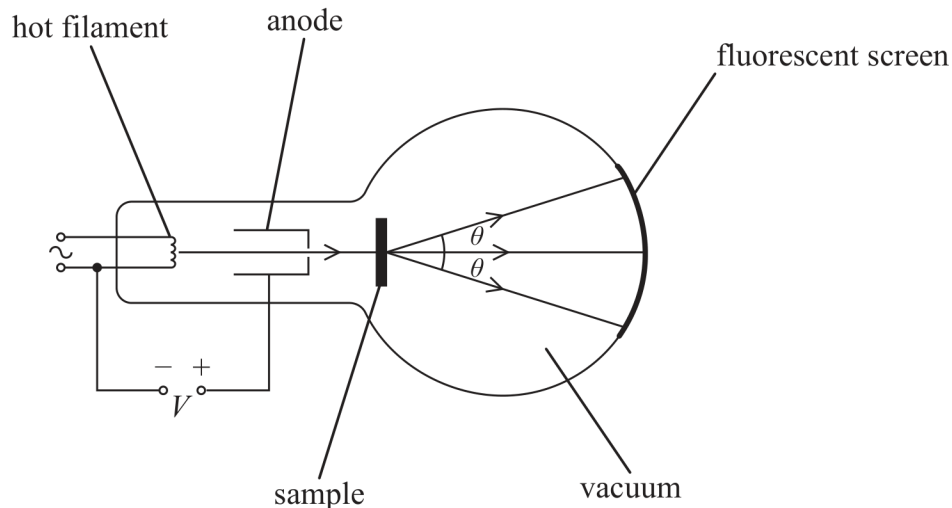


- 5 The diagram represents an arrangement to demonstrate electron diffraction.



A beam of electrons is directed at a sample of crystalline material.

Which of the following single changes would decrease the angle of diffraction  $\theta$ ?

- ☐ A decrease the distance between the sample and the screen
- ☐ B increase the anode potential  $V$
- ☐ C increase the current in the filament
- ☐ D use a sample with a smaller atomic spacing

(Total for Question 5 = 1 mark)