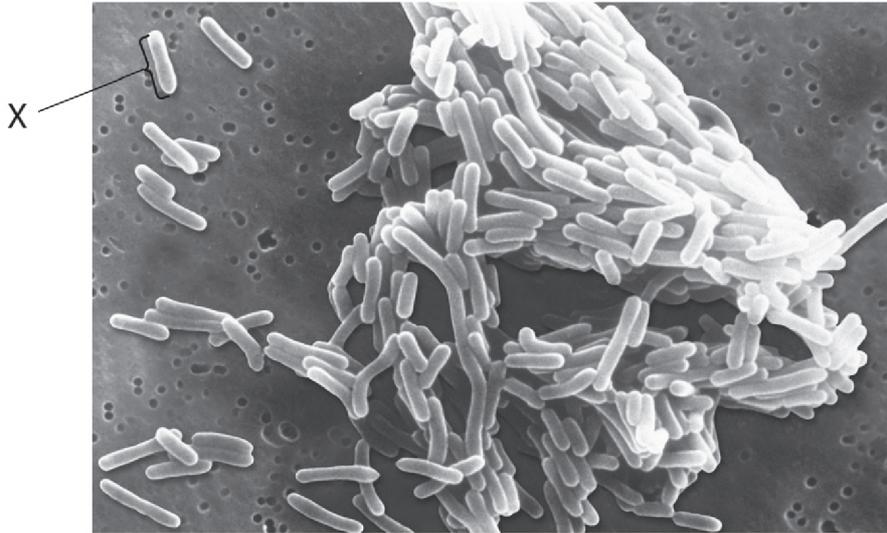


- 5 *Listeria monocytogenes* is a bacterium that contaminates food and causes the disease listeriosis.

The photograph shows a colony of these bacteria, as seen using an electron microscope.



(Source: © BSIP SA / Alamy Stock Photo)

(a) The bacterium labelled X on the photograph is  $0.5\ \mu\text{m}$  in length.

(i) Calculate the magnification of this image.

(1)

Answer .....

(ii) State why a light microscope cannot be used to view these bacteria.

(1)

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