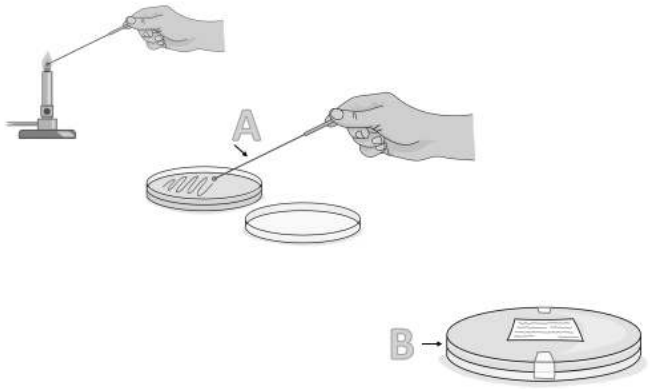
0 1 The diagram below shows the equipment needed to produce an uncontaminated culture of a bacteria species



0 1 . 1 Name the apparatus labelled A and B **[2 marks]**

A _____

B _____

0 1 . 2 Adhesive tape is used to secure the lid on apparatus B. Explain why

[2 marks]

_____

_____

_____

0 1 . 3 Once an uncontaminated culture of bacteria has been set up in a school experiment it then needs to be incubated. What temperature should the bacteria in apparatus B grow in during this experiment? Give a reason for your answer.

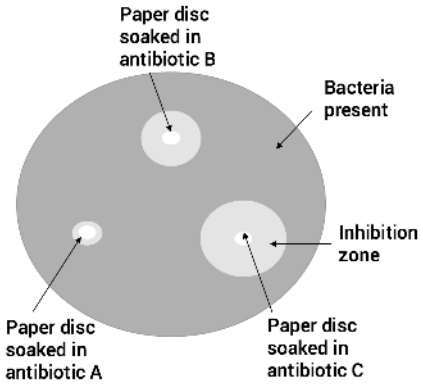
10℃ 25 ℃ 50 ℃

Reason: _____

_____

[2 marks]

0 2 . After culturing an uncontaminated species of bacteria, students at a school wanted to compare the effect of 3 different antibiotics A, B and C on the growth of the bacteria. The results of this experiment are shown below.



0 2 . 1 Which antibiotic; A, B or C was most effective against this bacteria? Explain your answer

[2 marks]

0 2 . 2 One way of comparing the effectiveness of different antibiotics on bacterial growth is the measure the area of the inhibition zone. Describe how to calculate this.

[3 marks]

0 2 . 3 State 2 control variables appropriate to this investigation

[2 marks]