

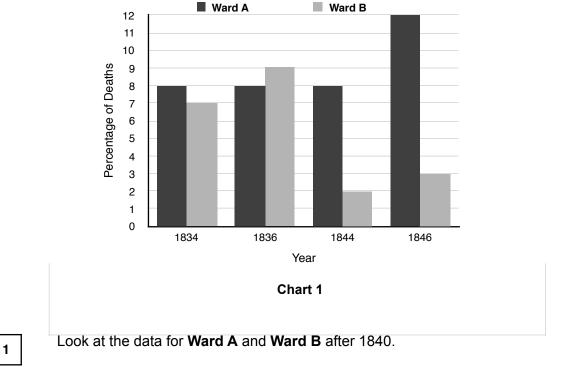
The graph below shows data regarding deaths of women who gave birth in a hospital during the 1800s. An important doctor working in the hospital was Dr Semmelweis.

Women gave birth in one of two wards, Ward A and Ward B.

Before 1840 both doctors and midwives worked in both **Ward A** and **Ward B**.

After 1840 only doctors worked in **Ward A** and only midwives worked in **Ward B**.

Doctors often worked in other wards with people who had diseases.



Describe the effect on death rate of having only midwives and not doctors working in **Ward B**. Refer to the data in Chart 1 in your answer. **[2 marks]** 

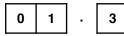


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Suggest a reason for the differences you described in question 01.1

[2 marks]



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After 1846, in a controlled experiment, Dr Semmelweis made doctors wash their hands in chloride of lime solution before delivering the babies.

The chart shows the death rates in the two wards from 1848.

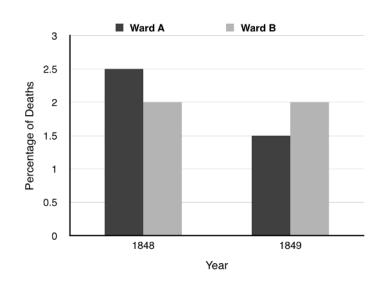


Chart 2

What was the impact of making doctors wash their hands in chloride lime solution? Use evidence from **Chart 1** and **Chart 2** to help you.

[3 marks]

Suggest why washing hands in chloride of lime had the impact you described in 01.3

[1 mark]

| 02. | 1               | Define what is meant by a pathogen  |
|-----|-----------------|---|
|     |                 | [1 mark]  |
| 02. | 2               | Read the information about TB then answer the questions that follow:  |
|     | bacter<br>cough | rculosis (TB) is a dangerous disease that is caused by a ium called Mycobacterium Tuberculosis. When a person with TB s and sneezes, the bacteria get into the air and then other people reathe them in." |
|     |                 | State the part of the body that TB bacteria invade and describe now this part of the body defends itself from infection.  |
|     |                 |   |
|     |                 | [3 marks]   |
| 02. | 3               | Describe how TB bacteria cause disease after they have entered the body?  |
|     |                 | [2 marks]   |
| 02. | 4               | Name one other type or group of microorganism, other than bacteria that can cause disease   |

[1 mark]