



Assessment Task Notification

FACULTY: SCIENCE

Student Name:		Class:
Title: Investigating the use of antiseptics in preventing disease		
Assessment Task Number: 2	Course: Science Stage 5	Weighting: 25%
Teacher/s:	Mrs Wilson, Mr Catt, Ms Gibson	Issue Date: 15-06-2026
Type:	Investigation and scientific report	Due Date: 26-06-2026
Allocated Lessons:		Time: 3:10
Syllabus outcomes being assessed:		
- explains how an understanding of the causes of disease can be used to prevent and manage the spread of disease SC5-DIS-01 - selects and uses a range of tools to process and represent data SC5-WS-05 - analyses data from investigations to identify trends, patterns and relationships, and draws conclusions SC5-WS-06 - communicates scientific arguments with evidence, using scientific language and terminology in a range of communication forms SC5-WS-08		
Assessment Presentation Guidelines:		
This notification must be attached to the task when submitted Students need to submit the task by handing the completed posters by hardcopy		

Task Description:

Inquiry question: imagine you are working for Lewtin Dermacare, a company that makes skin creams that can be applied to a graze to prevent skin infection. Experiments have been done to determine how well different antiseptic substances prevent bacterial growth. You now need to analyse the results of the experiment and explain them to the company's chief scientist in a scientific report.

In this task, you will present the results from an experiment in an appropriate table and graph, then analyse the results to write a discussion and conclusion. You will be provided with the report's inquiry question, aim, introduction, method and risk assessment sections, which you will unpack in class. These do not need to be included in your report.

In your scientific report, you should include the following:

Results

- Use a ruler to measure each antiseptic substance's **zone of inhibition** (clear area around the discs).
- Create a **table** to display the measurements. The table should also include the mean data for each antiseptic substance.
- Create a **graph** of the mean data. Your graph can be hand drawn on graph paper or produced in Microsoft Excel.

Discussion

- In your discussion, you should:
- identify which substances had antiseptic properties
- discuss which antiseptic substance(s) were most effective in preventing the growth of the skin pathogen
- discuss the reliability of the results and suggest relevant improvements
- consider the validity of the experiment and suggest any relevant improvements
- propose any further experiments or research that could be conducted to build on your findings.

Conclusion

Referring to the evidence collected, write a conclusion that addresses the inquiry question.

Additional Information:

**To prepare for this task you will complete a workbook to collect your research information.
The workbook is not assessed.**

Declaration of Authenticity

I certify that:

- The planning, development, content and presentation of this assessment task is my own work in every respect
- This assessment task has not been copied from another person's work or from books or the internet or any other source
- I have used appropriate research methods and have not used the words, ideas, designs, music, images, skills or workmanship of others without appropriate acknowledgement in this assessment task or in its development
- By submitting my assessment task electronically, I acknowledge this declaration of authenticity of my work

Student Signature

Date

Feedback

Feedback will be given to students verbally, in writing and on teams

Marking Criteria:					
Grade	A	B	C	D	E
Results table SC5-WS-05	All of: Clear, descriptive and concise title that accurately reflects the content. The table is well-organised (for example, borders) and easy to read. All columns and rows are clearly labelled with appropriate units. Data is accurate and correctly entered. The table includes all relevant data and excludes unnecessary information (for example, units are not entered in data cells). The mean is correctly calculated for each treatment.	Most of: Clear, descriptive and concise title that accurately reflects the content. The table is well-organised (for example, borders) and easy to read. All columns and rows are clearly labelled with appropriate units. Data is accurate and correctly entered. The table includes all relevant data and excludes unnecessary information (for example, units are not entered in data cells). The mean is correctly calculated for each treatment.	Clear and descriptive title. Data is displayed in an organised table with correct headings. Units might be missing in column headings and placed in the body of the table. The table includes all relevant data and might include unnecessary information (for example, units are entered in data cells). The mean is correctly calculated for each treatment.	Data is displayed in a table. The mean has not been used to summarise data. Key information might be missing, such as descriptive headings and units.	Data is not presented in a table.

Grade	A	B	C	D	E
Graph SC5-WS-05	The results are accurately presented in an appropriate graph that is easy to understand. The graph has correctly labelled axes, headings, units and a key if relevant.	The results are presented in an appropriate graph; however, one of the minor components is missing, such as the axis label and heading.	The results are presented in an appropriate graph; however, some minor components might be missing, such as the axis label and heading.	The results are presented in a graph; however, some major components might be missing, such as an axis scale or key, making it difficult to interpret the results.	A graph has not been included, or the graph might contain significant omissions or errors, such as incorrect plotting of data or scale.
Discussion – analysis of results SC5-WS-06	Results are correctly interpreted. Correctly explains the susceptibility of the bacteria to the different antiseptics and supports this with evidence.	Results are correctly interpreted. Correctly explains the susceptibility of the bacteria to the different antiseptics and supports this with some evidence.	Results are correctly interpreted. Correctly explains the susceptibility of the bacteria to the different antiseptics.	A basic interpretation of the results is provided. Correctly identifies the order of susceptibility of the bacteria to the different antiseptics.	Results are repeated in the discussion. Ideas are not clearly expressed, or an incorrect interpretation of the results is provided.
Discussion – sources of error and improvements SC5-WS-05 SC5-WS-06	Sources of error and limitations have been identified, and adequate ways of improving the reliability and validity of the investigation have been suggested.	Most sources of error and limitations have been identified, and some adequate ways of improving the reliability and validity of the investigation have been suggested.	Some sources of error have been identified, and improvements have been suggested.	A source of error has been identified. Inadequate or no improvements have been suggested.	Sources of error have not been identified, and there are no suggestions for improving the investigation.

Grade	A	B	C	D	E
Conclusion SC5-WS-06	The conclusion uses data to provide evidence to respond to the inquiry question and provides justification for inferences and conclusions.	The conclusion uses data to provide evidence to respond to the inquiry question and provides some justification for inferences and conclusions.	The conclusion answers the inquiry question and is consistent with the data and information gathered.	The conclusion is somewhat disconnected from the results or lacks detail in answering the inquiry question.	No clear conclusion is presented, or the conclusion is not based on the results of the experiment.
Communicating SC5-WS-08 SC5-DIS-01	Demonstrates an extensive understanding of disease cause and prevention. Arguments are communicated succinctly and coherently, using correct scientific language, terminology and evidence as appropriate to the identified audience.	Demonstrates a thorough understanding of disease cause and prevention. Arguments are communicated succinctly and coherently, using correct scientific language, terminology and evidence as appropriate to the identified audience.	Demonstrates a sound understanding of disease cause and prevention. Scientific ideas are communicated coherently, using appropriate scientific language and terminology, with some evidence and reasoning provided to support arguments.	Demonstrates a basic understanding of disease cause and prevention. Scientific ideas are communicated using some scientific language and terminology.	Components of the report do not contain relevant scientific language. The report is not presented coherently and does not provide evidence to support arguments.
OVERALL GRADE					

Teacher Feedback:

