

**YEAR 12 – 2023/2024**  
**INVESTIGATING SCIENCE**  
**M EAGLES**



**Task Number: 1**

**Notification Date: 30<sup>th</sup> November 2023**

**Weight: 25%**

**Due Date: Term 1 Week 5/6 2024– double period**

**Actual task date will be notified at the beginning of 2024**

**OUTCOMES ASSESSED**

INS12-1 develops and evaluates questions and hypotheses for scientific investigation  
 INS12-3 conducts investigations to collect valid and reliable primary and secondary data and information  
 INS12-5 analyses and evaluates primary and secondary data and information  
 INS12-6 solves scientific problems using primary and secondary data, critical thinking skills and scientific processes  
 INS12-12 develops and evaluates the process of undertaking scientific investigations

**TASK DESCRIPTION**

This assessment task involves students completing unseen practical and skills based questions based on the topic of “Impact of science on humans”. The task will run for the double period and each student will be given a space to work. All questions need to be attempted and handed at end of the double period.

**TASK DESCRIPTION AND INSTRUCTIONS**

This is an unseen practical and processing task with questions on

- Aspirin – first hand investigation including writing and modifying a hypothesis, designing a table and recording observations, identifying errors and limitations of experimental design, writing methods.
- Processing and analysing data – drawing a graph, writing a conclusion and identifying limitations of data
- Processing and Analysing Data, Problem Solving and Communication – interpreting information on van Helmont’s experiment including writing a conclusion, analysing an experiment, drawing explanations from information provided, discussing experimental validity and reliability

Students are able to use their class work and textbook during the task. They need to bring a ruler, pen, pencil, and eraser. A NESA approved calculator is optional.

**MARKING CRITERIA**

Marks allocated will be next to each question.

Task Mark	Task Rank	Cumulative Rank

Teacher’s signature: \_\_\_\_\_ Head Teacher’s signature \_\_\_\_\_ DP’s signature \_\_\_\_\_