



JOHN EDMONDSON HIGH SCHOOL

Assessment Notification

Faculty: Science Course: Science Year: 7

Assessment Task: Task 3: Depth Study

Assessment Weighting: 25% Due: Term 3 Week: 6 Date: Friday 30th August 2024

Task Type: Hand in Task In Class Task Practical Task

Due Dates:

1. **Draft booklet** – Term 3 Week 2 in class (during science lesson) for teacher feedback
2. **Final report**: -Term 3 Week 6 Friday 30/8/24 on CANVAS before Roll Call.

Outcomes assessed (NESA)

SC4-4WS: Identifies questions and problems that can be tested or researched and makes predictions based on scientific knowledge.

SC4-5WS: Collaboratively and individually produces a plan to investigate questions and problems.

SCA-6WS: Follows a sequence of instructions to safely undertake a range of investigation types, collaboratively and individually.

SC4-7WS: Processes and analyses data from a first-hand investigation and secondary sources to identify trends, patterns, and relationships, and draw conclusions.

SC4-8WS: Selects and uses appropriate strategies, understanding and skills to produce creative and plausible solutions to identified problems.

SC4-9WS: Presents science ideas, findings and information to a given audience using appropriate scientific language, text types and representations

Task Description/Overview

You are required to complete a Depth Study Report on the best insulating materials that holds heat. You will research on the topic related, write a scientific method and conduct a practical investigation and analyse your results. You will be given 2 different types of material and will be testing which material is better at insulating.

What is a depth study?

Students may investigate a particular aspect of science through an investigation/ activity or a series of investigations/activities, which are undertaken individually or collaboratively. Depth studies allow students a pathway to pursue their interests in science and engage more with scientific investigations. Depth studies may involve; a practical investigation, field work, a secondary source investigation, designing and creating a product or data analysis.

- You will receive a Depth Study Draft Booklet scaffold to guide your planning process.
- Your **Final Report** must be completed on the provided **report template** and submitted on **CANVAS** by **Friday 30/8/24 BEFORE ROLL CALL (8:20am)**

Important to note:

- 6 periods in class will be allocated for you to work on the Depth Study. You must bring your draft booklet on those days.
- If the Final Report is not typed in CANVAS, it will not be accepted. (Must use the Final Report template and upload it to CANVAS).

Late submissions:

- If you are sick on the day of submission, you must submit a **Request for Consideration Form** to the Head Teacher on the date of your return to school.
- Work that is plagiarised will receive a mark of zero and will need to be resubmitted.
- If you lose the paper version of any document, it can be found on CANVAS under assessment and then printed at your own cost.
- Computer or printer malfunctions are not considered a valid excuse for submitting an assessment late.

SECTION	MARKS	
Title (2 marks)	Correctly writes an appropriate and creative title for the investigation which clearly states the report's purpose.	2
	Attempts to write a title; does not clearly states the report's purpose.	1
	No attempt or not relevant.	0
Aim (2 marks)	Begins with the word 'To' and includes how the independent variable affects the dependent variable.	2
	Does not begin with the word 'To' but includes independent/dependent /OR begins with the word 'to' but does not include independent/dependent variable.	1
	No attempt OR attempts to write but no structure or no reference to variables.	0
Background information (3 marks)	All questions answered including a concise and comprehensive summary of relevant beforehand research in the topic area.	3
	Included a summary of current relevant background information, with one question not answered / irrelevant response	2
	Included some relevant background research with many questions not answered/irrelevant responses.	1
	Not attempted	0
Hypothesis (2 marks)	Using ifand then..... statement (independent and dependent variables mentioned).	2
	Prediction made without using the correct statement.	1
	No prediction made.	0
Equipment (3 marks)	All materials & quantities listed.	3
	Materials listed but no quantity provided.	2
	Incomplete list provided.	1
	No equipment listed.	0
Risk assessment (4 marks)	Two appropriate risks and two appropriate minimisations (minimisation must address the risks above)	4
	One risk and one appropriate minimisation	2
	No risks or minimisations	0
Variables (4 marks)	List at least 2 controlled variables. (2)	4
	Correctly identifies the independent variable. (1)	
	Correctly identifies the dependent variable. (1)	

Method (6 marks)	Numbered steps (1) Starts each step with a verb (1) Full sentences in present tense (1) Includes quantities needed and equipment used (1) Includes how results are being recorded (1) Includes repetition/trials for reliable results (1)	6
Results table (5 marks)	Relevant Title (1) Columns Headings (1) All column headings with correct units (1) Three trials completed and data recorded in an organised, sequential, and logical manner. (1) Average correctly calculated (1)	5
Discussion Questions (7 marks) Question 1 (2 marks)	Q1: Outlines the key findings of the experiment from the results table and identifies trends in the data. (1) Must include quantitative data from the results table and compare trends. (1) Incorrect answer or no response (0)	2
Question 2: (3 marks)	Q2: Correct definition of reliability (1) Makes a clear discussion whether their experimental investigation was reliable (1). Must support answer by commenting on repetition to obtain consistent results (1). No answer or incorrect (0)	3
Question 3: (2 marks)	Q3: Identifies ONE dot point provided to ensure their experiment was valid. (1) Provides an example from their experiment/reason to support the dot point of validity chosen. (1) No answer or incorrect (0)	2
Graph (7 marks)	An appropriate title is provided. (1) Chooses and includes an appropriate type of graph (1) Correctly labels the independent variable on the x-axis and includes units in brackets (1) Correctly labels the dependent variable on the y-axis and includes units in brackets (1) An appropriate scale is used that goes up by the same amount each time (1) Uses bars/columns are the same width and at the correct height based on the data recorded. (1) Includes all the independent variables (1)	7

Conclusion (2 marks)	<p>Conclusion is concise. It restates the hypothesis and whether the experiment tested it correctly. Identifies the main findings of the experiment.</p> <p>Basic conclusion: Missing one of the components above.</p> <p>Incorrectly written or no conclusion provided</p>	<p>2</p> <p>1</p> <p>0</p>
Grammar, spelling and overall presentation (3 marks)	<p>Spelling, grammar, and presentation:</p> <p>No spelling Errors in the report and correct tense, punctuation and homophones used. The overall presentation of depth study report is set out neatly in a clear and logical order with headings and subheadings.</p> <p>Less than 2 spelling/grammatical errors throughout report and the information is clearly set out.</p> <p>3-6 spelling and grammatical errors throughout the report and the formatting is basic.</p> <p>More than 7 spelling errors throughout the report and the formatting is poorly set out.</p>	<p>3</p> <p>2</p> <p>1</p> <p>0</p>

Total Marks

/ 50

Assessment Criteria		
Grade	Description	Mark Range
Outstanding (O)	The student has an extensive knowledge and understanding of the content and can readily apply this knowledge. In addition, the student has achieved a very high level of competence in the processes and skills and can apply these skills to new situations.	84.5-100
High (H)	The student has a thorough knowledge and understanding of the content and a high level of competence in the processes and skills. In addition, the student is able to apply this knowledge and these skills to most situations.	69.5-84
Sound (S)	The student has a sound knowledge and understanding of the content and has achieved a good level of competence in the processes and skills.	49.5-69
Basic (B)	The student has a basic knowledge and understanding of the content and has achieved a basic level of competence in the processes and skills	27.5-49
Limited (L)	The student has an elementary knowledge and understanding in a few areas of the content and still requires further work to achieve competence in the processes and skills.	0-27

Satisfactory completion of courses

A course has been satisfactorily completed, when the student has:

- Followed the course developed/endorsed by the NSW Educational Standards Authority (NESA)
- Applied himself/herself with diligence and sustained effort to the set tasks and experiences provided in the course.
- Achieved some or all of the course outcomes