



MOUNT ANNAN HIGH SCHOOL ASSESSMENT TASK NOTIFICATION

FACULTY	Technology & Applied Sciences	COURSE	Engineering Studies	YEAR	11
TASK NUMBER	1	TASK NAME	Appliance Research Task		
TASK WEIGHT	25%	MARKS AWARDED	50		
DATE OF NOTIFICATION	Thursday 7 th March 2024				
DUE DATE	Friday 22 nd March 2024				

TASK DESCRIPTION / INSTRUCTIONS

Task 1:

You are to analyse the materials used in the example espresso coffee machine.

- Explain the use and functional requirements of a home espresso machine.
- You need to identify and explain what each component does in the machine.
- Identify the properties that are required for each component both in service and manufacture.
- Explain why the material identified has the required properties identified.
- Suggest 2 possible materials that would have these properties for each component.
- Provide an explanation as to why each of the materials chosen in diagrams were selected over the alternatives that you identified.

Task 2:

- Select another complex household appliance and complete the same analysis
- Add labelled diagrams identifying the components of your appliance.

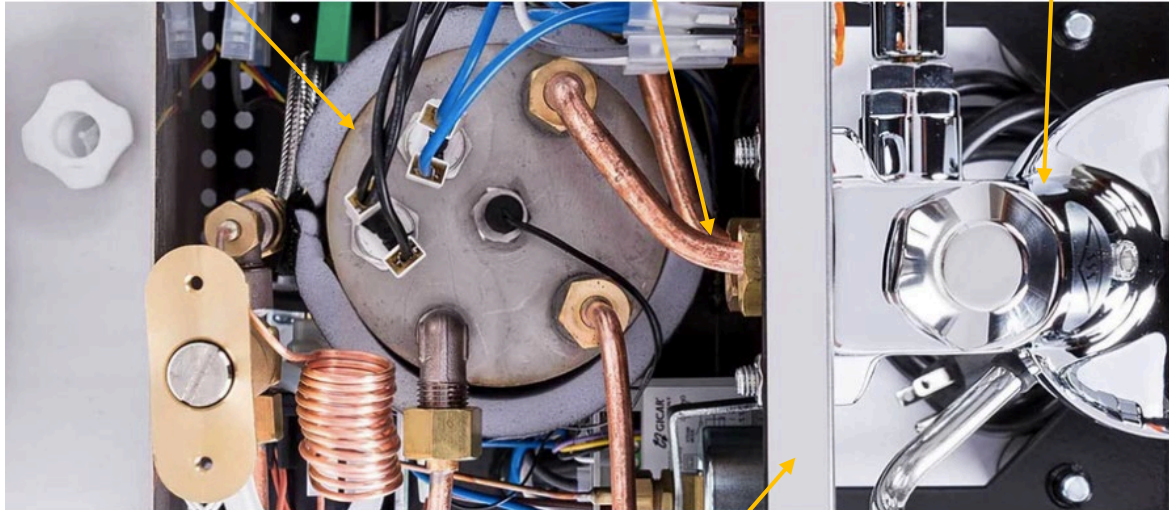


MOUNT ANNAN HIGH SCHOOL ASSESSMENT TASK NOTIFICATION

Stainless Steel Boiler

Copper Tubing for Pipework

Stainless Steel Fittings



Galvanised Mild Steel Frame



ABS Polymer Casing

ABS Polymer Dials and Buttons

PET Polymer Water Tank

Stainless Steel Steam Wand with Protective Rubber Grip

Stainless Steel Tray



MOUNT ANNAN HIGH SCHOOL

ASSESSMENT TASK NOTIFICATION

TASK SUBMISSION INSTRUCTIONS

- Task submission will be electronically through Google Classroom. It must be submitted by 11:59pm on the 24th March 2023.
- **It is to be submitted as a report in PDF format via Google Classroom.**
- The student reflection component of this notification is to be completed and submitted with the task

OUTCOMES

P1.2: explains the relationship between properties, structure, uses and applications of materials in engineering

P2.1: describes the types of materials, components and processes and explains their implications for engineering development

P5.1: demonstrates the ability to work both individually and in teams

P5.2: applies management and planning skills related to engineering

P6.1: applies knowledge and skills in research and problem-solving related to engineering

P6.2: applies skills in analysis, synthesis and experimentation related to engineering

FAILURE TO COMPLETE OR SUBMIT AN ASSESSMENT TASK

If you do not attend school on the Due Date of an Assessment Task to submit or complete the task in person you will be given a zero mark unless you comply with the following Assessment Guidelines:

- For Assessment Task completed at home – you must submit the assessment task before school on the next day you attend.
- For Assessment Tasks completed at school – you must report to the relevant Head Teacher before school the next day you attend and discuss when you will complete task missed or a substitute task.
- Complete a 'Misadventure Form' and provide relevant information and evidence to appeal the **zero mark** awarded. Other circumstances are outlined in the MAHS Assessment Booklet for the particular year. Evidence may include an in person medical certificate for illness or a letter outlining extenuating circumstances or other deemed reasonable reasons. An outcome of your 'Misadventure Form' will be provided by the Deputy Principal.

Students found guilty of **malpractice** which includes plagiarism will be awarded a **zero mark**. If a piece of work is incomplete at the time of submission, it should be submitted as is, and you will be given a mark on what has been completed.

As per our school Assessment Procedures outlined in the MAHS Assessment Booklet for the particular year, you must see your teacher and Head Teacher on the **first day you return** back to school. Please access our school website to access our assessment procedures for each year group and a 'misadventure form' - <https://mountannan-h.schools.nsw.gov.au/community/assessment-scedules.html>



MOUNT ANNAN HIGH SCHOOL ASSESSMENT TASK NOTIFICATION

MARKING CRITERIA	
The marking criteria for this assessment task has been determined by the Subject Band Performance Descriptors	Grade
<ul style="list-style-type: none"> ▪ constructs and evaluates engineering reports in order to recommend and predict solutions to engineering problems. ▪ displays critical thinking skills involving the analysis of engineering systems ▪ demonstrates a comprehensive understanding of the structure and property relationship between materials and manufacturing processes ▪ demonstrates sophisticated written, graphical and mathematical communication skills, using appropriate engineering terminology, methods and conventions. 	A
<ul style="list-style-type: none"> ▪ assembles and organises information for engineering reports and makes recommendations and predictions based upon engineering reports. ▪ has a good understanding of manufacturing processes and the structure and property relationship between materials ▪ demonstrates highly developed written, graphical and mathematical communication skills, using appropriate engineering terminology, methods and conventions. 	B
<ul style="list-style-type: none"> ▪ prepares and interprets engineering reports and makes some recommendations. ▪ links material structures with properties and therefore identifies appropriate manufacturing processes for a range of applications. ▪ demonstrates sound written, graphical and mathematical communication skills, using appropriate engineering terminology, methods and conventions. 	C
<ul style="list-style-type: none"> ▪ prepares and uses engineering reports. ▪ has a foundational understanding of manufacturing processes and the classification of materials ▪ demonstrates basic written, graphical and mathematical communication skills, using engineering terminology, methods and conventions. 	D
<ul style="list-style-type: none"> ▪ recognises the importance of engineering reports ▪ interprets data from graphs, recalls basic definitions and identifies steps in manufacturing processes. ▪ demonstrates elementary written, graphical and mathematical communication skills, using simple engineering terminology and conventions 	E
Non Attempt – Non Submission – Non Serious Attempt	0



MOUNT ANNAN HIGH SCHOOL ASSESSMENT TASK NOTIFICATION

STUDENT REFLECTION

I FEEL MY STRENGTHS WITHIN THIS TASK WERE

I FEEL MY WEAKNESSES WITHIN THIS TASK WERE

FROM THE MARKING CRITERIA I WOULD MOST LIKE FEEDBACK ON

TEACHER FEEDBACK