



Higher  
Coursework  
Assessment Task



# Higher Engineering Science Assignment – worksheets

## Manufacturing factory

Specimen – valid from session 2024-25 and until further notice

This edition: September 2024 (version 2.0)

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# Introduction

This document contains worksheets for candidates to use for the specimen Higher Engineering Science assignment. They must be used in conjunction with the assignment document.

# Instructions for candidates

This document contains the worksheets that you need for the current assignment. The assignment document tells you when you need to use a worksheet. Worksheets must be completed single-sided, with nothing written on the back.

Anything you handwrite or draw must be in blue or black permanent ink only.

## Task 1c – worksheet 1c

Planned test	Expected result	Actual result	Amendments made
Starting with the lowest temperature setting, increase the temperature to the thermistor to its highest setting	Motor will switch off		
Lower the temperature to the thermistor to its lowest setting	Motor will switch on		
Adjust the variable resistor, and then raise and lower the temperature	Motor will switch off or on at different temperatures		

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## Task 2d – worksheet 2d

Planned test	Expected result	Actual result	Amendments made
Adjust the LDR to drop the light level below 100	System is ready for switches to be activated – flow chart progresses to the next decision box		
Press the switch connected to input one, when light level is below 100	LED starts to flash		
Press either switch, when light level is below 100	LED flashes five times, then the motor spins		

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## Task 3c – worksheet 3c

A	B	C	D	Expected result	Actual result
0	0	0	0	1	
0	0	0	1	1	
0	0	1	0	1	
0	0	1	1	1	
0	1	0	0	0	
0	1	0	1	0	
0	1	1	0	0	
0	1	1	1	1	
1	0	0	0	0	
1	0	0	1	0	
1	0	1	0	0	
1	0	1	1	1	
1	1	0	0	0	
1	1	0	1	0	
1	1	1	0	0	
1	1	1	1	1	

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# Administrative information

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## History of changes

Version	Description of change	Date
2.0	Worksheets moved from assignment document to freestanding document.	September 2024

## Security and confidentiality

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