



ORANGE HIGH SCHOOL

ASSESSMENT TASK NOTIFICATION

Subject	Mandatory Timber Technology
Topic	Engineered Systems
Class Teacher	J Carter, T Thompson, D Boundy, J Lindsay, A Hetherington
Head Teacher	D Wait
Year	7 & 8
Date Given	Term 3, Week 7
Date Due	Term 4 week 5
Weighting	Task 2 & 4: 10% each. Task 3: 20%

NOTE: Some of these assessment task will be completed using class time.

Students studying Technology Mandatory Industrial Arts will be assessed on their ongoing practical work as well as an accompanying Design work and Folio. Students will be provided with time in class to complete these components, however any work missed or not finished within the set time will be required to complete these sections at home. The Engineers Assessment Task is a work at home requirement. Initial assistance in class and scaffolding will be conducted before needing to complete at home before submission date.

Task 2. Project Planning.

1. Project Idea- Collect a range of different automata images (minimum 15) and list positive and negatives for each.
2. Complete 3 sketches as ideas. These sketches need to consist of at least one Isometric drawing and orthogonal drawing of your chosen design.
3. Select and complete a final drawing that includes the following.
 - Isometric and an orthogonal drawing.
 - All measurements to complete the project.
 - A cutting list.
 - A construction procedure.

Task 3. Project- you are required to make your project.

- You are required to construct your own personal Automata Project in class. Your Automata must have at LEAST 3 moving parts. You will be assessed on the following
- Correctly measuring and cutting timber.
- Assembling timber products.
- Applying finishes to woodworking projects.
- Ability to work independently and teamwork.

Task 4. Evaluation- To evaluate your project you need to complete the following.

1. 3 things you learnt whilst completing your project.
2. 3 things you would do differently next time.
3. 3 problems you encountered and how you overcame these problems during the construction of your Automata.
4. What new skills you have learnt.
5. 3 positive and negative points about your project.
6. 3 things you can improve on.

Non-completion of Task:

If you know you are going to be away on the day that the task is due, you must make alternative arrangements with your teacher beforehand. If you are suddenly away on the day that the task is due, you must contact your teacher or Head Teacher on your return to school. Documentation will be required in both classes.

Plagiarism:

Plagiarism, the using of the work of others without acknowledgement will incur serious penalties and may result in zero award. Any cheating will also incur penalties.

Failure to follow the above procedures may result in a zero award.

The policies and procedures that are outlined on the ROSA booklet will be followed regarding the non-completion of assessment tasks.

Outcomes Assessed

TE4-8EN Explains how force, motion and energy are used in engineered systems.

TE4-1DP Designs, communicates and evaluates innovative ideas and creative solutions to authentic problems or opportunities.

TE4-2DP Plans and manages the production of designed solutions.

MARKING CRITERIA

<u>Outstanding</u> <u>(10-9)</u>	<u>High</u> <u>8-7</u>	<u>Sound</u> <u>6-5</u>	<u>Basic</u> <u>4-3</u>	<u>Limited</u> <u>2-1</u>
<p>Outcome: - TE4 -8EN- Explains how force and motion and energy are used in Engineered Systems (mechanization involving simple machines)</p> <p>TE4-1DP – Designs and communicates and evaluates innovative ideas and creative solutions to authentic problems</p> <p>Task 2: Project Planning.</p> <ol style="list-style-type: none"> Students investigate how the principles of simple machines can be applied to harness force, motion and energy to generate movement in at least 3 simple automated processes. Students generate ideas for 3 automated designs that has at least 3 moving components for each design and record their concept sketches, develop working plans for at least 1 (orthogonal and isometric). Students collate all the information from a and b above into an online folio on Google Drive or OneNote- shared with teacher 				
Outstanding collection of automata designs (15) 3 sketches are accurately labelled, lifters and followers.	Excellent collection of automata designs (15) 3 sketches are labelled with most cams, lifters and followers correctly identified.	Sound collection of automata designs (10 or more) 3 sketches which are labelled with most cams, lifters and followers correctly identified.	Basic collection of automata designs (5-10) 2 sketches at least one cam, lifter and follower labelled.	Under 5 automata designs. Very basic sketches. Incomplete, not labelled or incorrectly labelled.
Detailed written description of 2 automata designs considered Outstanding concept sketch for the 3 designs including detailed note relating to mechanical operation of the design ideas. Design must include at least 3 moving components for each	Detailed written description of 2 automata designs considered Excellent concept sketches for the 2 designs included detailed notes relating to mechanical operation of the design. Designs must include at least 3 moving components	Sound description of 1 automata design considered with 3 moving components, including notes relating to mechanical operation of the idea	Basic description of 1 automata design. Basic sketches with limited annotations of mechanical functions	Limited description of a design considered. Limited or no sketches of concept
Outstanding, accurate and detailed reasons for selecting designs to be developed into automata	Reasons for selected designs to be developed into Automata	Sound reasons given for selecting the idea	Few reasons given for selecting a design	Limited or not reasons for selecting concept
Orthogonal and isometric scaled diagrams/plans	Excellent scaled drawings Orthogonal and Isometric	Sound scaled orthogonal and isometric plan	Basic plan drawings, missing either orthogonal, isometric	No plans or drawings submitted

developed and included in folio	diagrams/plans developed and included in folio	drawings for chosen idea	or scale for chosen idea	
Outstanding procedure and clear and detailed steps, images of steps and tools equipment included	Excellent procedures, clear and detailed, images of steps, all tools included	Sound procedure, clear steps with some missing images, tools included	Basic procedure, missing some steps, images and tools	Limited procedure, missing most steps, no images, limited tools
Outstanding procedure and clear and detailed steps, images and steps. All tools and equipment included	Excellent evaluation of design and product, positives and negatives considered and possible changes identified.	Sound evaluation of design and product with some positives and negatives considered	Basic evaluation of design and product, 1 positive and negative identified	Limited, no evaluation completed

<u>Outstanding</u> <u>(10-9)</u>	<u>High</u> <u>8-7</u>	<u>Sound</u> <u>6-5</u>	<u>Basic</u> <u>4-3</u>	<u>Limited</u> <u>2-1</u>
Outcome: - TE4 -2DP- PRACTICAL TIMBER AUTOMATA				
Task 3: Students are producing the practical component of their automata.				

A 10-9	<ul style="list-style-type: none"> A complex mechanical element, consisting of 3 or more moving components, that easily move the toy as the handle is turned. Outstanding construction of final design with limited assistance from the teacher. Outstanding finish applied to project- neat, clean and tidy. No pencil marks, no split timber and no nails exposed. Finished project clearly meets all aspect of the design brief. All evaluation questions answered in sufficient detail with correct spelling, punctuation and easy to read.
B 8-7	<ul style="list-style-type: none"> A complex mechanical element, consisting of 3 moving components that move easily as the handle is turned. Excellent construction of final design with minor assistance from teacher. Excellent finish applied to project- neat and tidy. Minor pencil marks, no split timber and no nails exposed. Finished project clearly meets all aspects of the design brief. 1 or 2 evaluation questions missed most answered in sufficient detail with very little punctuation and spelling mistakes.
C 6-4	<ul style="list-style-type: none"> A sound mechanical element, consisting of 2 moving parts that move easily as the handle is turned. Sound construction of final design with assistance from the teacher. Sound finish applied to project- neat and tidy. Pencil marks, minor split timber and possibly some nails exposed. Finished project meets the design brief. 3 or 4 evaluation questions unanswered and no more than 3 spelling or punctuation mistakes.
D 3-2	<ul style="list-style-type: none"> A basic mechanical element, consisting of 1 moving component that generally moves when handle is turned. Basic construction of final design with regular assistance from the teacher. Basic finish applied to project- unfinished, pencil marks, minor split timber and possibly some nails exposed. Finished project meets the design brief. Evaluation incomplete very brief and more than 4 spelling mistakes.
E 1-0	<ul style="list-style-type: none"> Project incomplete- not all components have been attached to toy, toy does not move. Evaluation incomplete.

