


ASSESSMENT TASK NOTIFICATION

	<p>SUBJECT: Technology - CAD/ 3D Printing</p> <p>YEAR GROUP: 7/8</p> <p>TASK TITLE: Design, Draw, Make</p>	<p>_____</p> <p>Student Name</p> <p>Submitted To:</p> <p>_____</p>
---	---	--

Name of Unit:	3D Modelling				
Type of Task:	Research and Evaluation, Design Processes, CAD drawing and 3D Printing				
Due Date:		Term:	3	Week:	Part A- Week 4 Part B- Week 7 Part C- Week 9
Weight:	100% of Term mark				

OUTCOMES ASSESSED	<p>4.3.1 Applies a broad range of contemporary and appropriate tools, materials and techniques with competence in the development of design projects.</p> <p>4.2.1 Generates and communicates creative design ideas and solutions.</p> <p>4.5.2 Produces quality solutions that respond to identified needs.</p>
--------------------------	--

DESCRIPTION OF ACTIVITIES
<p><u>Part A.</u> 40 marks. (Skill acquisition)</p> <ul style="list-style-type: none"> Compile a list of key words and meanings relevant to CAD drawing and 3D printing. Complete seven (7) preliminary drawings that are sequenced to teach you the basics of the Inventor Pro drawing program. These drawings will need to be printed and pasted into your booklet. The drawing instruction sheets showing the sequence of operations are found on the school Moodle web page. <p><u>Part B</u> 40 marks. (Research, design development, drawing and making)</p> <ul style="list-style-type: none"> Complete the design specification page. Research current ideas and evaluate using the strengths and weaknesses template. Design and sketch your own ideas. Draw your USB holder or piece of jewellery using the CAD program. Complete a workshop drawing with all relevant dimensions. Export the completed drawing as an .STL file. Evaluate the article when printed with 3D printer. <p><u>Part C</u> 20 marks. (Independent Learning)</p> <ul style="list-style-type: none"> Complete the two (2) extension drawing exercises. These are found on Moodle.

METHOD OF SUBMISSION	<p>Part A CAD drawings are to be printed and glued into the work folder.</p> <p>Part B research and design drawings are to be completed in the work folder.</p> <p>Part C CAD drawings are to be printed and glued into the work folder. Object then printed on 3D printer.</p>
-----------------------------	---

MARKING RUBRIC

PART A

CRITERIA	GRADE
Demonstrated extensive knowledge of the CAD program procedures and features. Completed all preliminary drawing exercises to an excellent standard.	A
Demonstrated thorough knowledge of the CAD program procedures and features. Completed all preliminary drawing exercises to a very good standard.	B
Demonstrated sound knowledge of the CAD program procedures and features. Completed all preliminary drawing exercises to a satisfactory standard.	C
Demonstrated basic knowledge of the CAD program procedures and features. Completed most preliminary drawing exercises.	D
Demonstrated elementary knowledge of the CAD program procedures and features in drawing presentations.	E

PART B

CRITERIA	GRADE
Showed extensive evidence of research, evaluation and well thought out and creative idea development. CAD drawings were extremely accurate and able to be used to print the finished work.	A
Showed good evidence of research, evaluation and sound idea development. CAD drawings were accurate and able to be used to print the finished work.	B
Showed some evidence of research, evaluation and of idea development. CAD drawings were finished and able to be used to print the finished work.	C
Showed minimal evidence of research, evaluation and basic idea development. CAD drawings were not accurate or completed enough to allow the finished work to be printed.	D
Showed very limited evidence of research, evaluation and poor development of ideas. The final CAD drawing was not completed.	E

PART C

CRITERIA	GRADE
Worked independently to demonstrate extensive knowledge of Inventor modelling processes, and incorporated these skills into the extension drawing presentations.	A
Worked to demonstrate thorough knowledge of Inventor modelling processes, and incorporated these skills into the extension drawing presentations.	B
Worked to demonstrate sound knowledge of Inventor modelling processes, incorporating these skills into the extension drawing presentations.	C
Was able to demonstrate with help a basic knowledge of Inventor modelling processes, incorporating these skills into the extension drawing presentations.	D
Was only able to demonstrate elementary knowledge of CAD graphics procedures and conventions. Drawings were not completed or only partially completed.	E