

| STUDENT NAME:   | STUDENT CLASS: 3D CAD CAM  |  |  |
|---|--|--|--|
| SUBJECT: Year 9 - 3D CAD CAM  | WEIGHTING: 50%   |  |  |
| DATE TASK RECEIVED: Monday 13 <sup>th</sup> of Sept<br>Term 3 Week 10 | <b>DATE TASK DUE:</b> Friday 22 <sup>nd</sup> of October 2021<br>Term 4 Week 4 |  |  |

## OUTCOMES TO BE ASSESSED: Knowledge and skills in the design and production of practical projects

**IND5-2** applies design principles in the modification, development and production of projects **IND5-3** identifies, selects and uses a range of hand and machine tools, equipment and processes to produce quality practical projects

TASK NAME: Assessment Task 02

**TOPIC:** 3D modelling for additive manufacturing

**TYPE OF TASK:** Design and Prototype Task

TASK DESCRIPTION: This task is focused on 3D modelling for additive manufacturing. You are to design and build a 3D model/ character

Part 1: Component 2D Sketches

A 2D sketch of each component is required. This can be done by hand on the supplied grid paper or using Fusion 360 to create an electronic version.

Part 2: Building Your 3D Model/Character

A 3D finished model is required using whatever tools are available to you at home. This can be electronic or by hand Lego bricks, Playdoh, etc....

**Electronic:** Minecraft which is available as a free download and can be used across various platforms such as Xbox, PS4, PC, iPad... A copy of the existing Minecraft City is available via Google Classroom.

**Offline:** making creative use of what offline resources are available to you to build the city. This can include but not limited to Lego, Play-Doh etc..



## WHAT AM I BEING ASSESSED ON?

| SUBJECT: 3D CAD CAM | TASK NAME: Assessment Task 02 |
|---------------------|-------------------------------|
| STUDENT NAME:       | STUDENT CLASS:                |

|   | А   | В  | С  | D  | E   | N   |       |  |  |
|---|---|--|--|--|---|---|-------|--|--|
|   | Outstanding   | High   | Sound  | Developing   | Limited   | Unsatisfactory  | Total |  |  |
| Mark  | 15 - 13   | 12 - 10  | 9 - 7  | 6 - 4  | 3 - 1   | 0   |       |  |  |
| Research: Students Research and Plan their 3D Model -15 marks                               |   |  |  |  |   |   |       |  |  |
| CRITERIA:<br>IND5-2   | Provides an<br>outstanding<br>standard of 2D<br>sketch<br>components.                               | Provides a high<br>standard of 2D<br>sketch<br>components  | Provides a<br>satisfactory<br>standard of 2D<br>sketch<br>components.                        | Provides a<br>developing<br>standard of<br>2D sketch<br>components.                          | Provides a<br>limited standard<br>of 2D sketch<br>components                                | Did not submit<br>the task and<br>failed to follow<br>assessment<br>policy. | /15   |  |  |
| Implantation: Students implement their designs into a physical / electronic model -15 marks |   |  |  |  |   |   |       |  |  |
| Mark  | 15 - 13   | 12 - 10  | 9 - 7  | 6 - 4  | 3 - 1   | 0   |       |  |  |
| Criteria:<br>Outcome:<br>IND5-3   | Completed an<br>outstanding<br>standard 3D<br>model including<br>pictures of the<br>design process. | Completed a high<br>standard 3D<br>model including<br>some pictures of<br>the design<br>process. | Completed a<br>sound standard<br>3D model<br>including a<br>picture of the<br>design process | Completed a<br>sound<br>standard 3D<br>model with<br>no pictures of<br>the design<br>process | Completed a<br>limited standard<br>of 3D model with<br>no pictures of the<br>design process | Did not submit<br>the task and<br>failed to follow<br>assessment<br>policy. | /15   |  |  |
| Feedback:   |   |  |  |  |   |   | /30   |  |  |