

## Useless Box Marking Rubric

**Note:** If a section is not complete, or if the part is supplied, no marks will be awarded for that section.

| <b>Section</b>                | <b>Description</b>  | <b>Mark</b>                        |
|-------------------------------|---|------------------------------------|
| <b>Servo Operation</b>        | Tutorials followed to demonstrate understanding and control of a servo motor using an Arduino Nano  | /5                                 |
| <b>Schematic Design</b>       | Tutorials followed to complete a schematic layout (Diptrace) of the Useless Box circuit using an ATtiny85 microprocessor chip. Schematic diagram printed and submitted. | /5                                 |
| <b>PCB</b>                    | Tutorials were followed to complete the design of a Printed Circuit Board (Diptrace). PCB design printed and submitted.   | /5                                 |
| <b>3D Print</b>               | 3D printed hinge made using a supplied model file and slicer software (Tinkerine).  | /5                                 |
| <b>Laser Cut Project Body</b> | Use the Laser to cut out the components for the body of the project   | Omit<br>(supplied without penalty) |
| <b>Assemble/Complete</b>      | Useless box completed and fully operational.  | /20                                |
|                               |   |                                    |