KING EDWARD VI SCHOOL

Subject Level Descriptor

Department	Design and Technology	**Year Group**	8	**Assessment**	Balance toy practical
Assessment Summary	- To develop computer skills using 2D design to draw out a design suitable for the laser cutter - Demonstrate how to use a selection of hand tools and machinery suitable for metal working - Understand the pros and cons of using computer aided design over traditional methods				

	Skills and creativity	**Quality of final outcome**	**Independent learning**
Level 1	A simple laser design drawn on 2D design. Teacher assistance needed to complete work including help with lathe	Some joining and shaping methods attempted with teacher help. Quality is low and requires more attention to detail.	Frequent support required to ensure task was complete. Lacks confidence with tools and machines.
Level 2	A simple laser design using 2 different 2Design tools. Some amendments needed to be suitable for machine. Lathe used with some support.	The rod is bent and the end is hammered but overall shape needs improving. The screw thread fits but either too short or too long. Facing off on the weight is a little bumpy.	Some guidance needed to support learning or reminding of safety rules. Can follow instructions most of the time.
Level 3	A well-drawn laser design with some aesthetical errors. 3 or more 2D design tools used with confidence. Lathe used to face off weight accurately.	The rod is bent into a curve and the end is hammered flat. The screw threads fit together and facing off is almost smooth. A few parts need improving.	Works safely in the workshop using tools, equipment and PPE correctly. Can follow instructions well and asks questions to check understanding.
Level 4	A complex laser design has been achieved with few errors. A variety of 2Ddesign tools used with confidence Lathe used to face off weight with precision.	The rod is bent evenly and the end of hammered flat, suitable for drilling. The screw thread fits well into the hole and facing off on the weight is smooth.	Works very well in the workshop with some independence. Has confidence using tools and machinery.
Level 5	A complex and creative laser design that has been achieved independently using a range of 2D design tools. Little/no errors in any process.	Outstanding overall finish on metal using a file or emery cloth to remove uneven sections. Possible finish added. Facing off on the weight is a high standard.	Works independently with equipment and overcomes problems along the way. Supports others with tasks demonstrating skills and understanding.

Photographic evidence will be used to help assess outcomes