

**WHAT ARE THE BIG AIMS OF YEAR 8 PRODUCT DESIGN?**

Applying scientific principles and data to inform pupils designing at different stages of the design process. Collecting primary and secondary data to objectively evaluate design models.

**WHAT WILL EXCELLENCE LOOK LIKE IN YEAR 8?**

Modelled an accurately scaled idea for a concept sofa in a variety of soft modelling materials Made and tested a range of structures in different groups within a competitive scenario. Evaluated design ideas using CAD as part of planning as a team.

Presented a range of evaluations based on objective data interpretation.

**WHAT KNOWLEDGE DO THE PUPILS NEED TO ACQUIRE?**

- Products have a life cycle which have been affected by new manufacturing and fashion trends over the last 200 years.
- Be able to classify structures in different categories including forces/effects when under stress.
- Produce short reports, making suggestions for improving tested will allow data to be used during their testing.
- Use anthropometric data to inform and guide designing of a seating system for teenagers
- Be able to name and describe styles from a variety of decades including key influences to strength ratio.

**WHAT SKILLS DO THE PUPILS NEED TO DEVELOP?**

- Evaluate products that they are less familiar using themselves to use as a starting point to generating ideas.
- Use the welding and scribble design strategies to develop ideas naming into 3D models.
- Transfer plans and ideas from 2D sketches into 3D models that models.
- Be able to justify design modifications to collaborators using scaled
- Model. technical terminology of forces, dimension

**WHAT MISCONCEPTIONS MAY THEY HAVE FROM PREVIOUS LEARNING?**

Design decisions and evaluations are subjective.

The more material used in a structure the more effective it deals with forces.

Old designs are deemed out of fashion and undesirable.

**WHAT ASSESSMENTS WILL BE USED ACROSS THE YEAR TO DEMONSTRATE HOW THE PUPILS HAVE ACQUIRED THE KNOWLEDGE AND DEVELOPED THE SKILLS?**

Pupils will be given the opportunity to respond to both verbal and written feedback. Using DIRT. The use of “Hinge” questions will be used throughout the module of work. Knowledge checker at start of unit of work – multiple choice questions.

Ongoing teacher assessment of design and practical skills in order to inform planning.