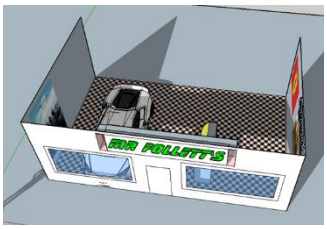
Year 8 D&T Graphics

Project / Theme

Shop Project Pt-1



Users
Ex products
Markets
Design brief

Research
Materials – Timbers, Aluminium
Fabrication techniques

Designing
Feet design
Model
High tech chair

Making
Plan / diary of making

Evaluation
Product Analysis

Starters
Past & present designers
Materials: Timbers, Aluminium
Fabrication techniques (Mass)

Homework
Materials
Electronics
Manufacturing Diary

Yr8 JSTC Module Content

Designing: Investigation into good design that meet the needs of the wider community requirements. Review / self / peer assessment of initial ideas. Development to show improvements using drawings and notes. Design specification relating to the design of a new building for the purpose of business use including the exterior and interior. Design ideas are generated & presented using a range of formats including ICT with annotated sketches.

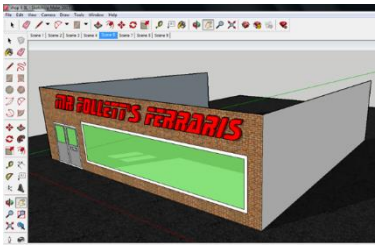
Making: Students will use a range of graphical techniques to mark out the different sections of their model for interior and exterior elements. Use of a craft knife and cutting mat are required. ICT generated graphics will be used to aid design. Scoring, folding and joining techniques will be learned. A range of different papers, boards, plastics and vinyl will be selected appropriately. Students will also have the opportunity to use laser cutting & CNC vinyl cutting.

Evaluate: Students will investigate modern innovation in building technological design. Use of specific criteria to ensure successful outcomes - evaluating and testing at key points taking into account the needs and views of users. Self / peer assessment at key points.

Technical Knowledge: Students will develop knowledge of material properties and sustainability issues. Building structures and modelling structures. Material selection relating to different performance requirements .Students will understand how basic light circuits could be used in their designs / products.

Project / Theme

Shop project Pt-2



Research
Existing 3D CAD designs

Designs
Digital diary of progress / improvements
ICT presentation
Animation presentation

Making
Shop exterior / interior
Further modelling challenge

Evaluation
3D CAD model self / peer
Presentation to class

Starters
Key CAD tools
Design development

Homework
3D CAD research
3D CAD use questions

Yr8 JSTC Module Content

Designing: Students develop further understanding of user needs & market groups, and research findings to generate ideas in response to a brief. 2D designs (orthographic) & 3D designs (isometric) are generated & presented using a range of formats including CAD. This module will also include specific design challenges.

Making: Students use a range of, Specialist techniques in 3D CAD including tool selection with use appropriately and effectively. Animation of final completed model.

Evaluate: Self / peer assessment at key stages of the project - presentation opportunities to showcase and evaluate design development. Investigation of existing 3D CAD and animation work by other professionals and teacher created work.

Technical Knowledge: Students will develop knowledge of creating different types of structures through the use of 3D CAD. 3D CAD animation - scene creation - timing - effects - composition.