

**DESIGN BRIEF:** *Design and manufacture a 3D model building in the architectural style of your choice*

## WEEKLY PLAN

- 1 - Architectural mood board
- 2 - 2D CAD
- 3 - 2D CAD
- 4 - Exporting & importing, DXF
- 5 - 3D CAD Modelling
- 6 - 3D CAD Modelling
- 7 - CAD Rendering
- 9 - Exporting jpegs
- 10 - CAM 3D Printing/Brochure
- 11 - CAM 3D Printing/Brochure
- 12 - CAM 3D Printing/Brochure

## TOOLS

*Craft knife, file, cutting mat*

## ADHESIVE

*UHU for print bed*

## MACHINES

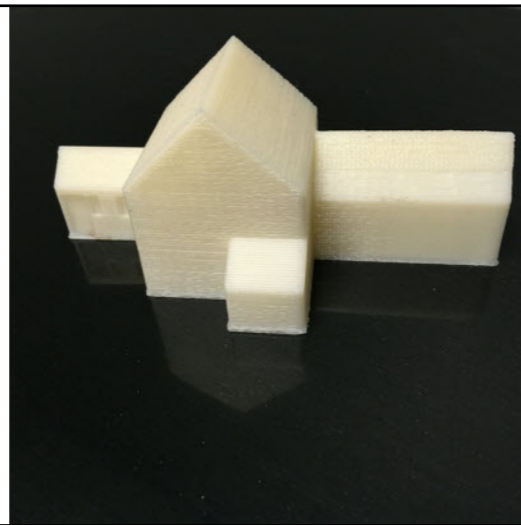
*Da Vinci 1-0 3D printer or alternative*

## MATERIALS

*Abrasive paper, ABS*

## HEALTH AND SAFETY

- 1-013 - Electrics & electronic equipment
- 1-011 - Craft Knives
- 1-055 - Plastics
- 1-032 - Vinyl and Laser cutting



## PROCESSES

*CAD - Designing using 2D Design V2 and a 3D modelling program such as Pro Desktop V8, Creo or Autodesk Inventor*

*CAM - 3D printing, set up and maintenance of the machine, 3D printing process, cleaning model*

## HOMEWORK

*Interior design of a room, research on building styles, CAD/CAM, Collection of bitmaps*

## SMSC

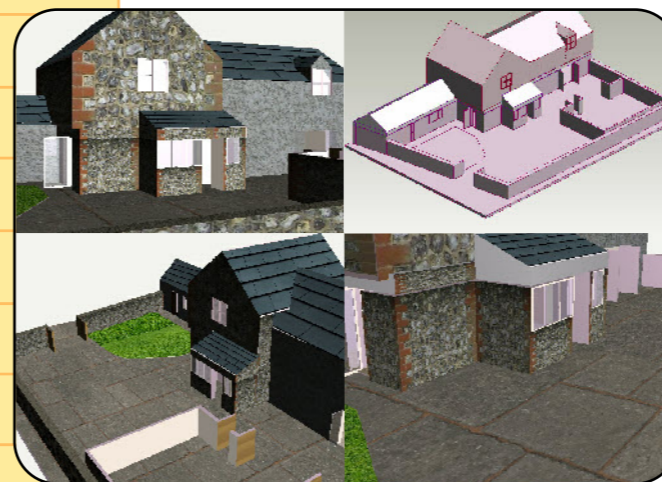
*Culture, industrial practise, team work, Sustainability, 6R's*

## SIZES

*Size of plot - 50mmx50mmx50mm*

*This can depend on time available and work area of 3D printer*

*Brochure produced on 2 sheets of A3*



## WORKSHOP RULES

*PPE - Goggles and aprons in workshop*  
*Safety Rules - Heat is the main concern with 3D printing if it has a heated bed, extruder Nozzle also gets to a very high temperature*  
*Make sure that products are not removed until bed has cooled down*  
*Safe & appropriate use of computers and 3D printer*

## DIRT

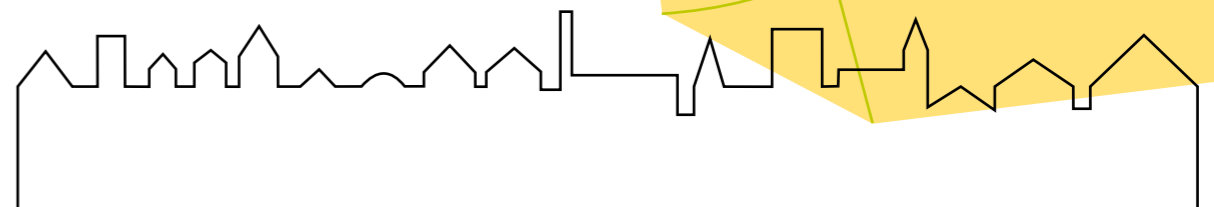
- Rewrite and improve
- Correct spellings
- 10 x corrected spellings
- Grammatical errors
- Respond to comments
- Copy out neatly
- Likes or dislikes about a piece of work
- Set targets for improvement
- Compare your work with that of another pupil
- Emoticon your work
- RAG learning objectives
- Underline all headings

## Extension Tasks:

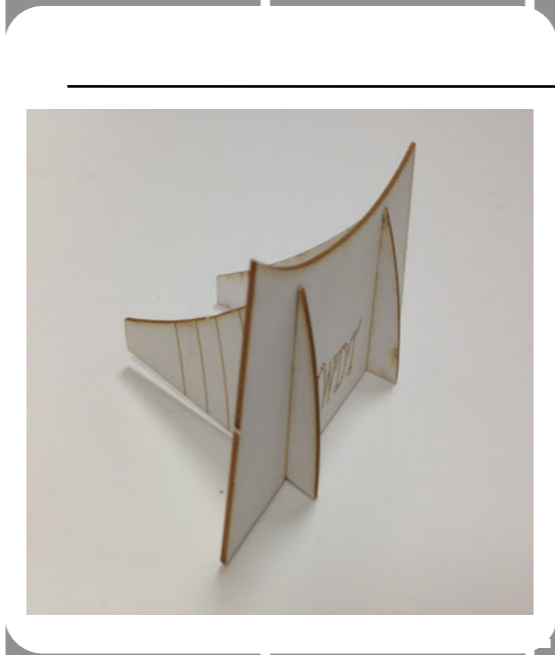
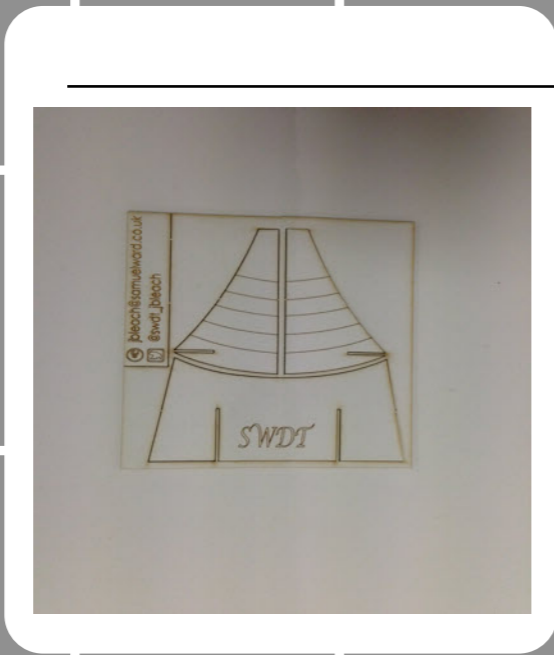
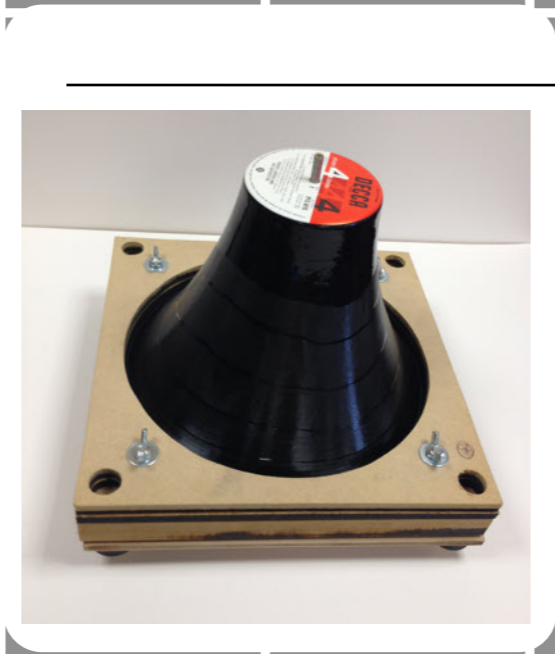
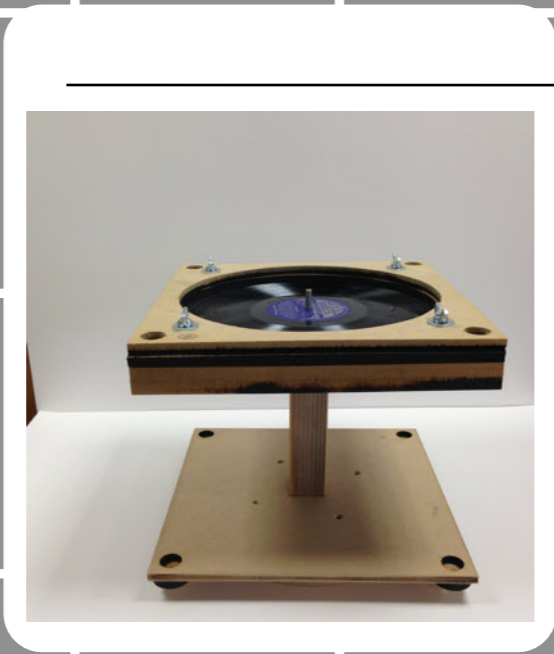
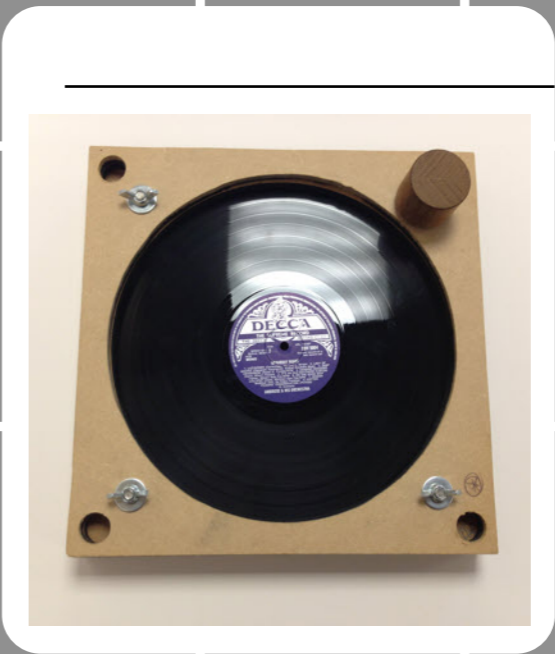
*Build internal structures within CAD model.*  
*Internal renders.*  
*Picture deconstruction and node manipulation in 2D CAD.*  
*Density and quality of 3D print.*

# JAMBLE SOW

Designed by  
JAMBLED&T







**CHANGE  
THE  
RECORD**