Train Knowledge Organiser

Tier Three Vocabulary

CAD

Sketchup

Specification

Design

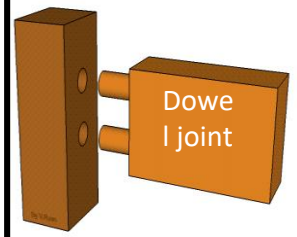
Dowel joint
Tenon saw
marking gauge
sander
evaluate
annotate

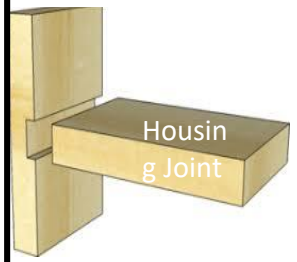
Knowledge

- how to select and use the correct tools and equipment (marking gauge, try square, steel rule, tenon saw, mortise and bevel chisel, mallet, vice, pillar drill, sander)
- and gain an understanding in the use of redwood, dowel, acrylic and using water based acrylic paint accurately.
- why accurate measuring and marking skills are important to a good outcome for instance using a try square and marking gauge correctly
- why we use 3D CAD drawing packages (Sketchup)to develop and model ideas

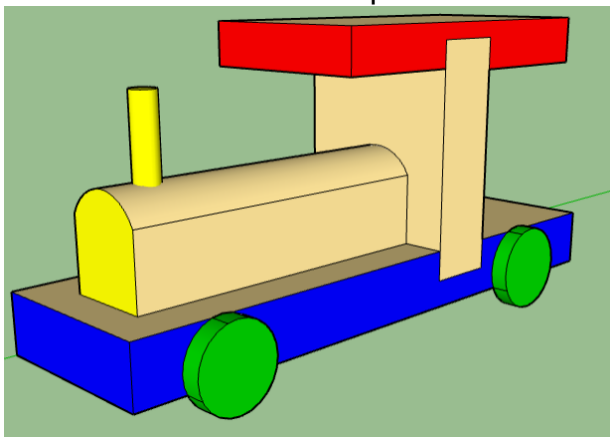
Skills

- work effectively as an individual to produce a high-quality and unique product
- write and develop and use an effective specification
- select and use tools equipment and machinery safely and accurately (marking gauge, try square, steel rule, tenon saw, mortise and bevel chisel, mallet, vice, pillar drill, sander)
- demonstrate accurate measuring and marking out to their own specification using a try square and marking gauge correctly
- use 3D CAD drawing packages (Sketchup) to develop and model ideas





SketchUp is a CAD (computer aided design package which can be used to complete 3D modelling



Train Achievement Descriptors

Good

- Train completed to a good standard
- 1mm gap between the joints
- All components made close to the correct size
- Less than an 85-degree angle on all of the corners
- Some saw and pencil marks evident
- Paint applied with a good level of accuracy
- Accurate carriage designed and manufactured

Better

- Train completed to an excellent standard
- No gaps between the joints
- All components made to the correct size
- 90-degree angle on all of the corners
- Very few saw and pencil marks evident
- Paint applied with an excellent level of accuracy
- Creative and accurate designed and manufactured

The Best

- Train completed to an excellent standard
- No gaps between the joints
- All components made to the correct size
- 90-degree angle on all of the corners
- No saw and pencil marks evident
- Imaginative and creative paint applied with an excellent level of accuracy
- Creative and challenging designed and manufactured

Tools and Equipment

Here are the tools and equipment used to manufacture a timber train:

Try Square used to mark 90°

Marking gauge
Used to mark a parallel line along the edge

Pencil

Steel rule

Tenon saw
Used to cut straight lines

Mallet:
Used to tap the chisel
to create the housing joint

Chisels:
used to remove small pieces layers of timber a

Sander :
used to remove small areas of timber and make the parts smooth

Pillar Drill : used to create accurate holes in Materials