

Plane Knowledge Organiser

Tier Three

Vocabulary

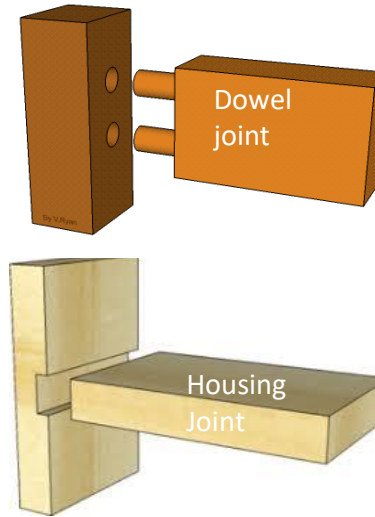
Housing joint,
Tenon saw,
dowel,
coping saw,
marking gauge,
pillar drill,
sander,
evaluate,
design,
annotate

Knowledge

Know how to Analyse and develop ideas from existing designs
Know how to write a specification
Know how to evaluate the work

Skills

Be able to select the correct tools and equipment
Be safe and accurate in the use of tools, machinery and equipment
Be able to spot hazards
Have an awareness of safety procedures
Be able to use accurate measuring and marking skills
Evaluate and annotate their work
Develop and improve their work
Work effectively as an individual



These are examples of sentence starters which could be used for specifications and evaluations

CQ How would you complete a specification for your plane?

- I am designing and making an: _____
- The client who I am designing my product for is: _____
- The materials I will be using are - _____ because _____
- The colours I will use are: _____ because _____
- The jointing methods I will use are: _____ because _____
- The theme for my product will be: _____ because _____
- The quality of the product will be evident in the: _____
- The product I am manufacturing will have a minimal impact on the environment because: _____

CQ How would you complete a good quality evaluation of your practical work?

- I have designed and made an _____
- I think that my client will like the design because _____
- The materials I used were _____ this worked well because _____
- The colours and theme I used were _____ and I think my client will like this because _____
- The jointing methods I used were _____, I think that the joints look good because _____
- The quality of the product is evident in the _____
- The product I have manufactured will have a minimal impact on the environment because _____
- My plane could be improved by: _____
- I like my plane because _____

Aeroplane Achievement Descriptors

Good

- Aeroplane mostly complete
- 3mm gap in the housing joints the joints
- All components made close to the correct size
- Larger than an 85-degree angle between the body and the wings and tail
- Little attempt to remove saw and pencil marks evident
- Paint applied with little accuracy

Better

- Aeroplane complete
- 2mm gap or less in the housing joints
- All components made to the correct size
- 85 to 90-degree angle between the body and the wings and tail
- Some saw and pencil marks still evident
- Paint applied with a good level of accuracy

The Best

- Aeroplane complete
- 1mm gap or less in the housing joints
- All components made to the correct size
- 90-degree angle between the body and the wings and tail
- No saw and pencil marks evident
- Paint applied with an excellent level of accuracy

Tools and Equipment

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

Try Square used to mark 90°



Marking gauge

Used to mark a parallel line along the edge



Pencil



Steel rule



Coping saw

Used to cut curves



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

