








D&T Y7 Knowledge Organiser

A: Tools and equipment

| Name of tool | Picture | What the tool is used for |
|--------------|---|---|
| Steel rule |  | An accurate tool for measuring and marking out. |
| Try square |  | A tool used to check and mark right angles on wood or plastic. |
| Tenon saw |  | A hand saw with a stiff back used to cut straight lines in wood. |
| Coping saw |  | A hand saw used to cut curves and complex shapes in wood and plastic. |
| File |  | Used to shape or smooth the wood, metal or plastic. |
| Rasp |  | A coarse (rough) form of file used for coarsely shaping wood, metal or plastic. |
| Glass paper |  | An abrasive paper that is used to smooth the edges or surface of wood. |

B: Step by step instructions: How to make a finger joint



Step 1
Hold the two pieces of wood together as shown. Mark a line on both pieces of wood with a pencil.



Step 2
Measure 30mm from each side and draw two lines as shown using a try square.



Step 3
Using a tenon saw, cut along the lines you have drawn. Remember to cut on the waste side of the line.



Step 4
On one piece of wood cut off the outside corners using a tenon saw.



Step 5
On the other piece of wood cut out the centre piece using a coping saw



Step 6
File your finger joint until the two pieces fit together neatly.

C: Keywords

- finger joint: a joint used in woodworking which looks like interlocking fingers
- tenon saw: a handsaw used for cutting straight lines
- coping saw: a handsaw used to cut curves and complex shapes
- pine: a type of softwood
- acrylic: a type of plastic
- rasp: a hand tool used to remove large amounts of wood quickly
- file: a hand tool used to smooth materials
- template: a pattern used to help cut material accurately
- evaluation: assessing the strengths and weaknesses of something
- analysis: a detailed examination of something
- properties: how we describe materials e.g. rigid, flexible, rough, smooth, shiny, matt etc.

D: Health and Safety

- listen to your teacher's instructions
- always wear an apron
- long hair should be tied back
- don't use any equipment you have not been shown how to use by your teacher
- always stand up during practical lessons
- always carry tools pointing downwards
- only use the stop button in an emergency
- work quietly
- be sensible and careful at all times



Revision Checklist

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| I know the health and safety rules | |
| I can name the tools and draw them without looking at the pictures | |
| I can explain what the tools are used for | |
| I can explain step by step how to make a finger joint | |
| I can spell the keywords | |
| I can identify the key word from its description | |