

# DT – Photo frame

Year 8



Tools, Equipment & Machinery	
Name	Use
Belt faced sander	To smooth rough edges. Shouldn't be used on small or thin pieces.
Bench hook	Placed in a vice and used as a guide to cut straight lines in thicker blocks of wood
Coping saw	Used to cut curved lines, blade can be removed to cut holes.
Flat file	Used to smooth straight edges and removing waste wood
Glass paper	Used to smooth edges of wood and plastic, used after filing.
Hand clamp	Used to hold small pieces or oddly shaped material when using the pillar drill
Hand Vice	Used to hold work whilst using the pillar drill.
Laser Cutter	Used to cut, etch or engrave on to materials using high powered lasers.
Needle files	Small files which will remove excess material for small details or small holes
Pillar drill	Used to drill holes in materials.
Rat's tail file	Conical shaped file, which removes waste or excess material from circles or rounded edges
Tenon saw	Used to cut straight lines, and for cutting thicker blocks of wood.
Vice	Used to hold materials upright and securely on the desk, so that you can work with them.

2D Design			
Symbol	Description	Symbol	Description
	<u>Circles</u> To draw circles freehand, with given dimensions, to round corners,		<u>Path</u> To draw curved lines freehand, within a given space, closed or open paths.
	<u>Delete</u> To delete an entire object, part of an object, or just selected objects.		<u>Select Tool</u> To select an item of the page, or to select a tool to use. You won't be able to do anything without first clicking on this.
	<u>Dim Lines</u> To measure in a variety of way (e.g. vertically, horizontally, circles etc.)		<u>Shapes</u> To draw squares, rectangles, triangles, polygons, with given dimensions
	<u>Layout</u> To change the size of the page, it automatically sets to A3.		<u>Text tool</u> To add words freehand, on a given line, or in a given space
	<u>Line tool</u> To draw lines freehand, with a given length, at a given angle.		<u>Vectorise</u> To change an image from the internet in to an image the laser cutter can read.
File Types		Line colours	
<b>.dtd</b>	Allows you to open the folder in 2D design	<b>Red</b>	Cut through – The line will be cut all the way through
<b>.dxf</b>	Allows the laser cutter to open your file	<b>Green</b>	Profile cut – The line will be partially cut
		<b>Blue</b>	Engrave – The line will be "filled"

Health & Safety
In the workshop there should be: <ul style="list-style-type: none"> <li>- No running,</li> <li>- No eating.</li> <li>- No drinking,</li> <li>- No throwing,</li> <li>- No fighting.</li> </ul>
When taking part in a practical lesson you should: <ul style="list-style-type: none"> <li>- Tie your hair up,</li> <li>- Wear an apron,</li> <li>- Remove or secure loose clothing,</li> <li>- Stack your stool neatly,</li> <li>- Store your bag in the cage,</li> <li>- Store your phone in the box provided,</li> <li>- Hang your blazer/coat on the pegs.</li> </ul>
When using machinery you should: <ul style="list-style-type: none"> <li>- Wear safety goggles,</li> <li>- Be aware of where the emergency stop button is,</li> <li>- Have been trained by the class teacher</li> <li>- Make sure you are the only one in the yellow box.</li> </ul>