

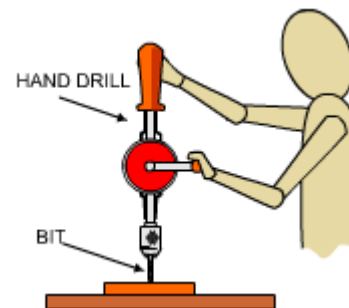
Design Technology Subject Knowledge Bank Year 2: Cutting and Shaping materials

<u>Vocabulary</u>	<u>Definition</u>
Design brief	The plan for what you are going to make.
Dowel	A cylindrical rod usually made of wood
Sanding	Shaping and smoothing wood using rough sandpaper.
Drilling	Cutting a hole into a solid material using rotating pressure.
Grain	Direction of wood
Vice	A tool that holds a material firmly in place whilst working on it.
Finished product	The finished item that you have made
Assemble	To put together.



Sanding

- Sanding wood using sandpaper, removes imperfections and makes the wood smooth.
- Use a sanding block and sand with the grain of the wood.
- the smoother your sanding the less friction and nicer finish. sanding, drilling, grain, vice, design brief, doweling



Drilling

Drilling is a process that uses a drill bit to cut a hole into wood or other solid materials.

- The bit is pressed against the item and rotated by the drill. To be able to drill vertically downwards your position needs to be above the work piece.
- A pilot hole is a small hole/indentation that will help the drill bit sit in place'
- The workpiece needs to be clamped into position to prevent it moving as you drill – both hands are required to use a rotary hand drill.
- Hold the main handle of the rotary hand drill with your non-dominant hand in a vertical position.
- Ensure that the drill bit sits in the pilot hole.
- When you feel comfortable and ready, begin to turn the turning handle with your dominant hand clockwise in a constant, smooth drilling action. The drill bit will start to turn and begin to create a hole.
- Keep drilling until you have made a hole to your required depth or right through the workpiece.

