



KWAGGASRAND SCHOOL

YEAR 3

WOODWORK

TERM 2

LEARNER WORK DURING LOCKDOWN

Week 1 – 3: EQUIPMENT: Identify, describe and demonstrate the following portable machines:

- Electric hand drill
- Battery screw driver
- Electric jig saw
- Orbital sander
- Belt sander
- Circular saw
- Electric hand planer
- Biscuit joiner
- Router

ELECTRIC HAND DRILL

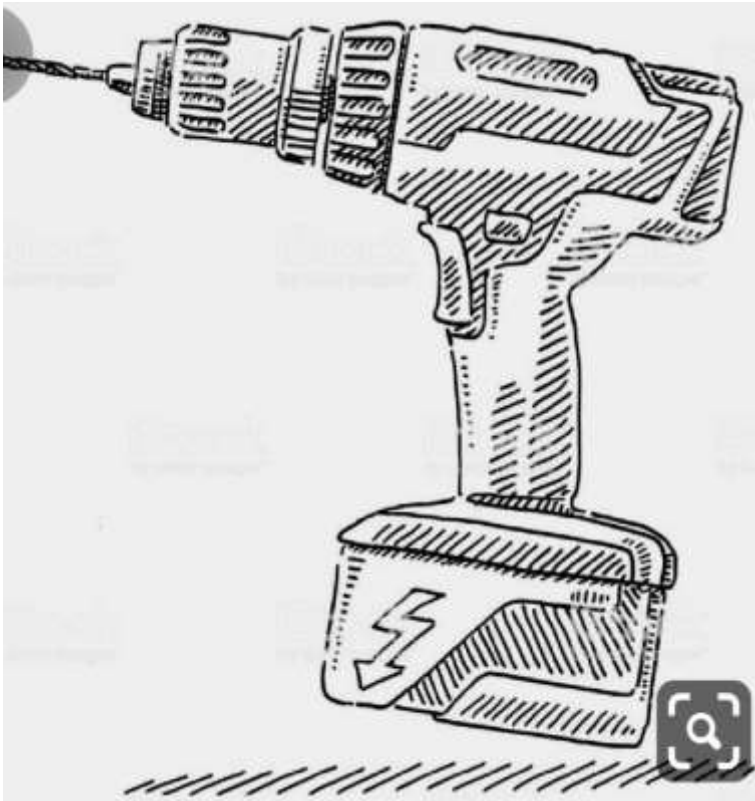
- An Electric hand drill is a portable power tool used to drill holes into wood, steel etc.
- It is mainly used to drill holes in work pieces, which cannot be drilled into by a bench drilling machine.
- The drill uses different sizes and sorts of drill bits.
- Always use the drill safely with the necessary safety gear.



Look at uses for the hand drill by watching the following link: https://youtu.be/5Cc5t6_SqmY

BATTERY POWERED SCREW DRIVER

- This screw driver is portable and powered by a rechargeable battery.
- This screw driver can sometimes also be used as a drill.
- The screw driver uses different screw bits, such as flat- and star bits.
- It is used to fasten or unfasten different screws from workpieces.
- A Battery screw driver should be used safely with the necessary safety gear.



Look at the uses of a battery powered screw driver by using the following link: <https://youtu.be/grnoi528kCY>

ELECTRIC JIG SAW

- A portable electric jig saw is used to cut workpieces with curves or complex shapes.
- It also works well for making short crosscuts on boards and finishing inside corner cuts that you start with a circular saw.
- Jig saws are not good for making fast, long, straight cuts. Rather use a circular saw for those purposes.
- Always use a jig saw safely, as it uses a blade which can easily cut off your fingers. Use the necessary safety gear.



Look at the uses for a jig saw by using the following link: <https://youtu.be/b3RB3Vq8yQI>

ORBITAL SANDER

- An orbital sander is a portable power tool that vibrates in tiny circles and is used for smooth sanding of workpieces.
- The orbital sander's sanding surface can be round or square.
- It is used on wood, plastic or metal work.
- An orbital sander should be used safely with the necessary protective gear including a dust mask.



Look at the uses for an orbital sander by using the following link: <https://youtu.be/MDFKUuJCYTU>

BELT SANDER

- A belt sander is a portable power tool, also a multi-use tool commonly used for sanding very rough surfaces, levelling surfaces and freehand rounding and shaping.
- A belt sanders belt moves at an incredible high speed and can easily cause injuries, if not operated safely.
- A belt sander should be used with necessary safety gear and a dust mask.



Look at the uses for a belt sander by using the following link: <https://youtu.be/VboSCiGJMvM>

CIRCULAR SAW

- A circular saw is a portable electric tool for cutting wood.
- It uses different blades for cutting other materials.
- It can be left or right-handed depending on the side that the motor is situated.
- A circular saw should be used safely, as it can easily cut off a body part.
- Always use the necessary safety gear when using a circular saw.



Look at the uses of a circular saw by using the following link: <https://youtu.be/4jpOYxRyTFY>

ELECTRIC HAND PLANER

- The electric hand planer is a portable tool which is used to smooth the surface of wood, or used to smooth wood's rough end grain.
- The hand planer can also be used for tapering wood, ex. a door.
- The planer should be used safely as it can easily cause injuries.
- Always wear safety gear when using an electric hand planer.



Look at the uses of an electric hand planer by using the following link: <https://youtu.be/ZY7OE31xTJ8>

BISCUIT JOINER

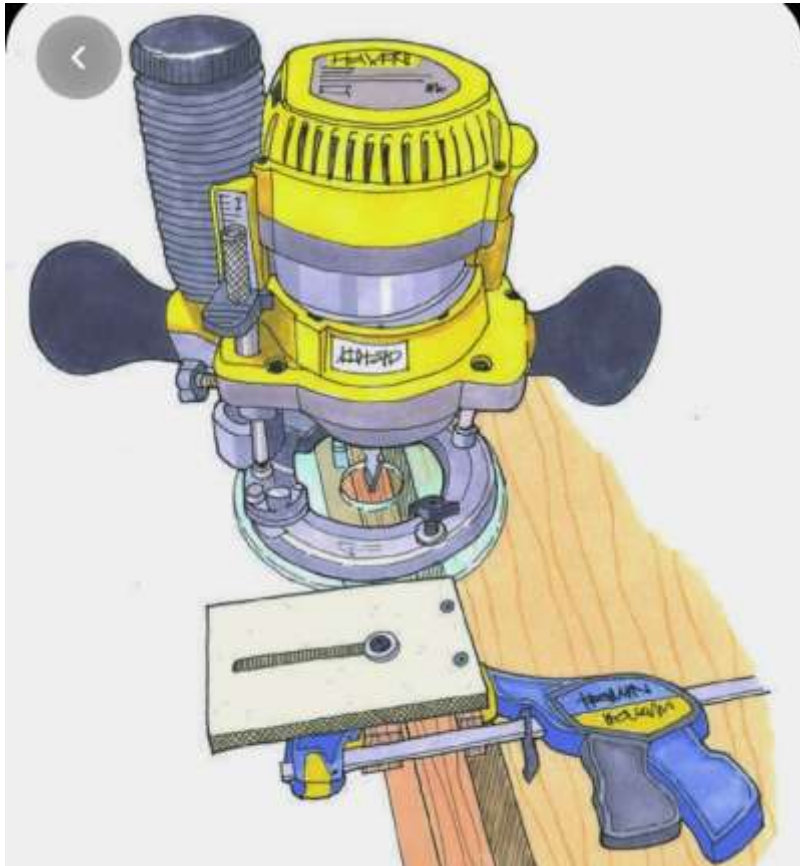
- A biscuit joiner is a portable electric tool that uses a small circular saw blade to cut a crescent-shaped hole (called the mouth) in the opposite edges of two pieces of wood or wood composite panels.
- A biscuit is then glued into the mouths to join the two work pieces together.
- Use with care and necessary protective gear.



Look at the uses of a biscuit joiner by using the following link: <https://youtu.be/DaGWoBiNBxk>

ROUTER

- A Router is a portable electric tool used to hollow out an area in wood.
- A Router is mainly used in woodworking such as carpentry.
- Routers are typically handheld or fastened cutting end up in a router table.
- The router should be handled safely with the necessary safety gear.



Look at the uses of a router by using the following link: <https://youtu.be/mcLBmdYs5iU>

GENERAL SAFETY TIPS FOR WOODWORK

- Never operate any tool without the necessary protective gear.
- This includes ear plugs, safety glasses, dust masks, overalls and safety boots.
- A tool in motion can cause serious injuries or even death.
- Never place a tool, which is still in motion, down on any surface or leave it unattended.
- Always use protective shields on electric tools and never remove such shields.
- Only use tools with permission and under proper supervision.
- No horseplay around tools, as it can cause serious injuries, even if not in use.
- Always keep work areas clean, to avoid injuries.