

### Student Handout

#### Electrical safety

In woodworking shops, electrical hazards such as frayed electrical cords are particularly dangerous because of the high risk of fire or explosion. Serious accidents can also happen when equipment becomes 'live' due to electrical faults, lack of maintenance, or short circuits. Electric shock and electrocution happen when a person becomes part of an electrical circuit and the current flows through their body.

#### Examples of hazards

- burns from hot components
- electrical shocks
- fire or explosion from ignited sawdust, wood products, solvents or adhesives

#### Safety tips

- Use electrical equipment according to manufacturers' instructions.
- Keep electrical equipment in safe working order through inspection and preventative maintenance programs.
- Disconnect and report faulty equipment such as frayed cords or broken power points.
- Always switch off electrical equipment at the power point before pulling out the plug.
- Keep electrical cords off the floor to reduce the risk of damage from dragging, contact with sharp objects, or contact with water. A damaged electrical cord can cause electrocution.
- Know the location of the main electricity supply. If a breaker or fuse blows, disconnect the power source, then identify and fix the problem before resetting the breaker or replacing the fuse.
- To prevent getting a shock, follow lockout procedures before working on electrical items (see Student Handout on Lockout).





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- ❑ Wear shoes with insulating soles and/or stand on a non-conducting mat.
- ❑ If someone gets an electric shock, shut off the power before trying to help them.
- ❑ Only use hand tools that are insulated against electric shock (e.g., plastic or rubber handles).

