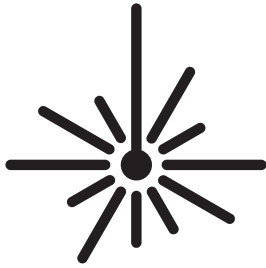# LASER CUTTING

Skill Tree: Color in the boxes and level up your skills

Use for individuals or as a group by picking a colour each and coloring in a part of the box. Everyone's journey is different and you can interpret the goals flexibly. The aim is to inspire you to learn and try new things. Not everything needs to be completed.

ADVANCED

BASICS

(set your own goal)

(set your own goal)

(set your own goal)

(set your own goal)

(set your own goal)

(set your own goal)

- Make a laser cut project that's bigger than yourself
- Use a Galvo/ Fiber laser Cutter
- Use a rotary laser to engrave a curved object
- Upload a design online
- Optimize a repetitive job for speed
- Teach a workshop on laser cutting
- Use a 3D engraving technique (eg. depth map)
- Make a hard material bend with living hinges
- Cut a non-standard material (e.g. leather, rubber stamp, leaf, shell)
- Engrave metal
- Use a 3D design software, to create a complex fitted part
- Create a complex design from scratch using vector software
- Use a single-line font
- Aa
- Make a custom workholding solution or jig
- Make something from laser cut fabric / leather
- Combine laser cutting with hardware (bolts, hinges etc)
- Nest parts for maximum material efficiency
- Learn how to use boolean tools effectively
- Add paint or color to a project
- Join a laser cutting group (online or in person)
- Make something with a few different materials
- Fix a laser cutter when something goes wrong
- Convert something from one vector format to another
- Fit something to a real-life object (use a photo or scan)
- Learn the kerf settings for your laser
- Combine laser cutting and 3D printing in the same project
- Use multiple passes to cut through a thick material
- Do a marquetry project
- Solve a real-life problem with laser cutting
- Teach a friend a laser cutting skill
- Optimize a design for engraving
- Use a camera mounted to your laser to position your jobs
- Add electronics to a laser cutting project
- Make something for a friend
- Have an idea and make it in less than 1 hr
- Engrave ceramic, tile or stone
- Find perfect image/photo engraving settings
- Use tabs to keep small pieces in a design in place
- Make something from upcycled materials
- Modify your laser cutter (air assist, add camera, change firmware, etc)
- A
- Use a box generator and laser cut a box
- Make a design using stacked materials
- Make a stencil
- Reverse engineer something for a project
- Make something with a perforated fold/ tear-away
- Make an organizer with laser cutting
- Cut something from acrylic
- Use a material test file to test a new material
- Find perfect cut settings for a new material
- Use an auto-trace function to turn pixels into vectors
- Make a simple design in vector software
- Make something from multiple laser cut parts
- Cut something from timber
- Get a design wrong and try again
- Learn what kind of laser you are using
- Prototype a project with cardboard
- Buy something pre-made and laser etch it
- Use cutting and engraving in the same project
- Learn the difference between CO² and diode laser cutters
- Customize a design using vector software
- Make a tool with laser cutting
- Set up an exhaust or air filtration system
- Learn your laser interface software
- Upload a file to your laser interface software and use it
- Learn which materials are unsafe to cut
- Make sure safety equipment is in place for using your laser
- Use a laser cutter for the first time
- Find a pre-made file online to use with your laser cutter

START | **HERE**

1 tile = 1 point

Total Score

Name: _____