CNC & CAM

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

(set your own goal)
(set your own goal)
(set your own goal)
(set your own goal)
(set your own goal)

Build your own CNC Machine
Make a custom workholding jig
Modify a post-processor
Machine titanium
Use heatshrink tooling
Teach a CNC class
Use a CNC Lathe

Repair a CNC after a crash
Use a fixture plate
Cut a 3D contour
Machine an unknown material
Use a ball mill
Teach a friend CNC skills

Upgrade your CNC machine
Make soft jaws
Engrave text
Machine a used part
Use a chamfer tool
Sell something you've made
Fill an engraving with wax or resin

Tram or align your CNC machine
Use a vice
Use a finishing cycle
Machine steel
Use a boring tool
Make multiple parts that fit together
Accidentally misalign the second side of a job

Check machine alignment
Use work stops for multiple parts
Machine a pocket
Machine a composite
Use a fly cutter
Make a mechanical part or tool
Hit a tight tolerance

Use multiple work offsets
Add tabs to a part
Use peck drilling
Machine brass or copper
Use an endmill
Make a part to repair something
Clean down a CNC

Use a digital probe to set origins
Use a vacuum table
Cut a 2D Contour
Machine aluminium
Use a collet chuck
Design something and upload instructions online for others to use
Use material that is too small

Use tool offsets
Fix stock with clamps
Face off a part
Machine plastic
Use a facemill
Make a 3D art piece
See "chatter" in your part

Touch off material manually
Fix stock with double-sided sticky tape
Generate your first G-code file
Machine timber
Use a keyless chuck
Make something as a gift
Break a tool

Fix stock with screws
Use a feeds & speeds calculator
Use a CNC for the first time
Use a drill bit
Visit your local makerspace or woodworking club
Get safety gear

BASICS

START HERE

1 tile = 1 point

Total Score

Name: _____

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github.com/sjpiper145/MakerSkillTree

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