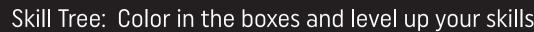
## CNC & CAM



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.

Machine

titanium

Machine

an unknown

material

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

> Use heatshrink tooling

> > Use a ball

mill

Use a chamfer

tool

Use a boring

tool

Use a fly cutter

Use an endmill

Use a

collet chuck

Use a

facemill

(set your own goal)

Build your own

**CNC Machine** 

Repair a CNC

after a crash

Upgrade your

CNC machine

Tram or align

your CNC machine

Check machine

alignment

令

Use multiple

work offsets

Use a digital

probe to set origins

 $\oplus$ 

Use tool

offsets

令

Touch off

material manually

令

Modify a post-processor

Make a custom

workholding jig

Use a fixture

plate

Make soft

Use a vice

Use work

stops for multiple

parts

Add tabs to

a part

Use a vacuum

table

Fix stock with

clamps

Fix stock with

double-sided

sticky tape

Fix stock with

screws

Cut a 3D contour

:::::

Engrave text

A

Use a finishing

cycle

Machine

a pocket

Use peck

drilling

Cut a 2D

Contour

Face off a

part

Generate your

first G-code file

G1

Use a

feeds & speeds

calculator

Machine a used part

Machine steel

Machine a composite

Machine

brass or copper

Machine

aluminium

Machine

timber

Use a CNC

for the first time

盟

Machine plastic

Use a keyless

chuck

Use a drill bit

**B** 

Visit your local makerspace or woodworking club

0

(set your own goal)

Fill an engraving

with wax or resin

F

Accidentally misalign

the second side of a job

Hit a tight

tolerance

令

Clean down

a CNC

Teach a CNC class

> Use a CNC Lathe

Teach a friend CNC skills

Sell something

you've made \$

Make multiple parts that fit together

o<sup>o</sup>

Make a mechanical part

or tool Ø

\*/: Make a part to repair something

> Use material that is too small

Design something and upload instructions online

> for others to use See "chatter" in your part

/// Make a 3D art piece

**→** Make something as a gift

1 tile = 1 point

Get safety gear

**Total Score** 



**START** 



**HERE** 

Name: github.com/sjpiper145/MakerSkillTree

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