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

BASICS

(set your own goal)
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Build your own CNC Machine

Use an automatic toolchanger

Make a 3D art piece

Use a CNC Lathe

Teach a CNC class

Design something and upload instructions online for others to use

Machine a large piece

Use a vacuum table

Change tool in a G-Code Program

Retrofit an old CNC machine

Accidentally set fire to a wooden part

Sell something you've made

Use an XYZ Probe

Tram your CNC machine

Use a fixture plate

Visit your local makerspace or woodworking club

Make multiple parts in the same program

CNC a printed circuit board

Accidentally misalign the second side of a job

Make something as a gift

Fill an engraving with resin or paint

Use a Z probe

Make a part in titanium

Use a non-standard cutter

Modify a post-processor

Accidentally use thre wrong tool

Use a vise

Fill an engraving with wax

Drill an array of holes (eg. speaker grill)

Make a part in steel

Drill a hole using a drill cycle

Use cutting oil or spray

Accidentally run a tool through your nearly finished part

Make a custom part-holding jig

Engrave a picture

Use a finishing pass

Make a part in Aluminium

Machine a hole with an endmill

Make a part with a fillet

Make a part in plastic

Try to make a part larger than your stock

Make mechanical parts that fit together

Make a two-sided part

Fix stock with clamps

Teach a friend CNC skills

Make a 3D part with curves in the z axis

See "chatter" in your part

Make a mechanical part

Add tabs to a part

Make a part in wood

Fix stock with screws

Engrave text

Use a feeds & speeds calculator

Break a tool

Use a facing tool

Make a 2.5D part with pockets

Cut out a circle

Fix stock with glue

Find Z zero on your part

Make a 2D flat part

Generate your first G-code file

Use a V-Cutter

Use an endmill

Cut out a square

Fix stock with double-sided sticky tape

Use a ball mill

Use a CNC for the first time

Cut a pocket

1 tile = 1 point

START HERE

Total Score

Name: _____

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