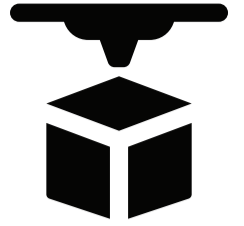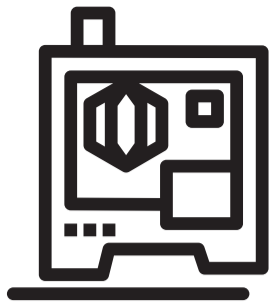# 3D PRINTING

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)

- Build your own 3D printer
- Create an instructable, hackaday page or Hackster.io page on a project
- Send a file to your printer wirelessly
- Teach a class on 3D Printing or 3D modelling
- Install and use a nozzle larger or smaller than the standard size
- Try heat annealing a part to make it stronger
- Use a different type of 3D printer eg. Food, clay, Pancake
- Use a multi material 3D Printer
- Print something large
- Print in Carbon Fibre material
- Recycle filament or failed prints in a creative way
- Print in Nylon or ASA material
- Try a different Slicing Software
- Print something in metal or metal-like material
- Sand and paint something you've printed
- 3D Model something and upload it under an Open Source licence
- Acetone smooth an ABS part
- Get 3D scanned and print a model of yourself
- Mod your 3D printer with something 3D printed
- Visit your local makerspace
- Print something to wear
- Print something again after making design improvements
- Print something that makes a noise
- Use heat set threaded inserts in a part
- Print a mould for a casting project
- Sell something you've 3D printed
- Print something for cosplay or prop making
- Repair something with 3D printing
- Print in a flexible material
- Reverse engineer something in CAD software
- Teach a friend how to 3D Print
- Use PVA dissolvable support material
- Print something that requires more than 1kg of filament
- Mix your own resin blend
- Print in ABS material
- Print in two colors or materials
- Upload a remix of a 3D model
- Make a lithophane from a photo or image
- Embed electronics, magnets or something else inside a 3D print
- Have a print failure with lots of spaghetti
- Print a tool of some kind
- 3D print something on fabric
- Model and print something that solves a problem
- Edit an existing model and print
- Print in PETG material
- Print a model with tree supports
- Print something functional
- Use spiralise or vase mode to print something
- Do a hot pull and cold pull cycle to unclog a nozzle
- Have a failed print and fix the problem
- Identify and fix a settings issue
- Calibrate a resin printer
- Print something that moves (eg. fidget toy)
- Change a nozzle for the first time
- Set up a resin printing PPE and wash & cure station
- Create something from Customizer on Thingiverse
- Accidentally break a print while removing support material
- Print an articulating or print in place model
- Use a resin printer for the first time
- Print a batch of something
- Print something educational
- Print something with multiple parts and assemble
- Print an organiser for the home
- Use an FDM printer for the first time
- Print in PLA material
- Print a gift for a friend or family member
- Put on your first 3D Print
- Learn how to level your print bed manually

START HERE

1 tile = 1 point

Total Score

Name: _____