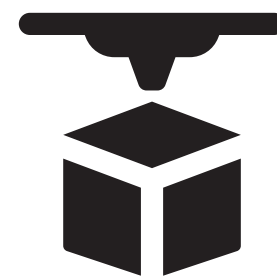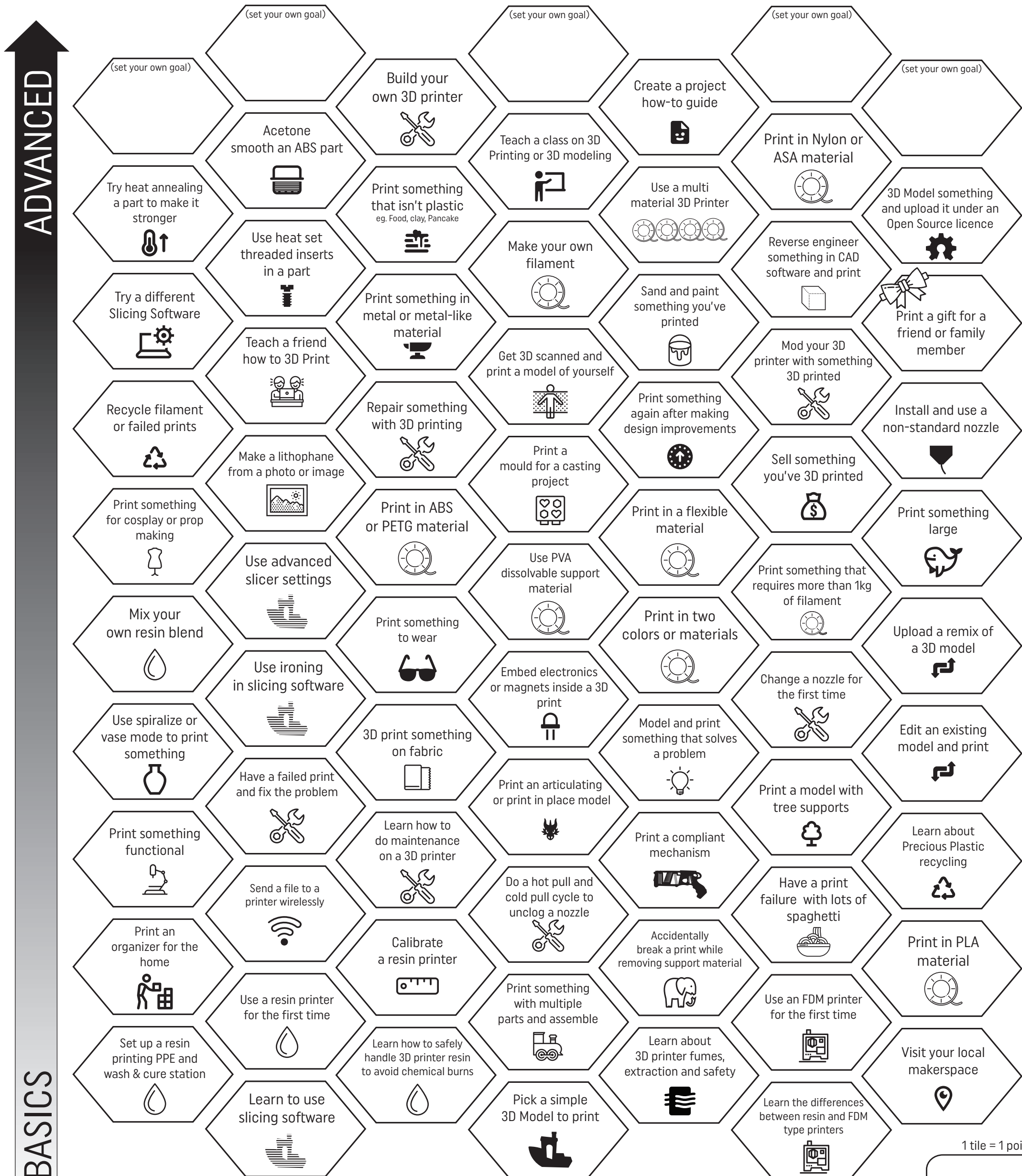# 3D PRINTING

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 a project how-to guide
- Acetone smooth an ABS part
- Teach a class on 3D Printing or 3D modeling
- Print in Nylon or ASA material
- Try heat annealing a part to make it stronger
- Print something that isn't plastic eg. Food, clay, Pancake
- Use a multi material 3D Printer
- 3D Model something and upload it under an Open Source licence
- Use heat set threaded inserts in a part
- Make your own filament
- Reverse engineer something in CAD software and print
- Try a different Slicing Software
- Print something in metal or metal-like material
- Sand and paint something you've printed
- Print a gift for a friend or family member
- Teach a friend how to 3D Print
- Get 3D scanned and print a model of yourself
- Mod your 3D printer with something 3D printed
- Recycle filament or failed prints
- Repair something with 3D printing
- Print something again after making design improvements
- Install and use a non-standard nozzle
- Make a lithophane from a photo or image
- Print a mould for a casting project
- Sell something you've 3D printed
- Print something for cosplay or prop making
- Print in ABS or PETG material
- Print in a flexible material
- Print something large
- Use advanced slicer settings
- Use PVA dissolvable support material
- Print something that requires more than 1kg of filament
- Mix your own resin blend
- Print something to wear
- Print in two colors or materials
- Upload a remix of a 3D model
- Use ironing in slicing software
- Embed electronics or magnets inside a 3D print
- Change a nozzle for the first time
- Use spiralize or vase mode to print something
- 3D print something on fabric
- Model and print something that solves a problem
- Edit an existing model and print
- Have a failed print and fix the problem
- Print an articulating or print in place model
- Print a model with tree supports
- Print something functional
- Learn how to do maintenance on a 3D printer
- Print a compliant mechanism
- Learn about Precious Plastic recycling
- Send a file to a printer wirelessly
- Do a hot pull and cold pull cycle to unclog a nozzle
- Have a print failure with lots of spaghetti
- Print an organizer for the home
- Calibrate a resin printer
- Accidentally break a print while removing support material
- Print in PLA material
- Use a resin printer for the first time
- Print something with multiple parts and assemble
- Use an FDM printer for the first time
- Set up a resin printing PPE and wash & cure station
- Learn how to safely handle 3D printer resin to avoid chemical burns
- Learn about 3D printer fumes, extraction and safety
- Visit your local makerspace
- Learn to use slicing software
- Pick a simple 3D Model to print
- Learn the differences between resin and FDM type printers

START HERE

1 tile = 1 point

Total Score

Name: _____

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MADE BY STEPH PIPER - MAKERQUEEN AU