3D PRINTING & MODELLING

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)

Make a model in a sculpting software
eg. Blender, Z-brush, MudBox, Maya, etc

Send a file to your printer wirelessly
eg. Octoprint, Astroprint or Built-in feature

Create something to address one of the Sustainable Development Goals

Teach a class on 3D Printing or 3D modelling

Create an instructable, hackaday page or Hackster.io page on a project

Install and use a nozzle larger or smaller than the standard size

Create a customizable model in OpenSCAD

Try heat annealing a part to make it stronger

Print in Carbon Fibre material

Use a different type of 3D printer
eg. Food, clay, Pancake

Recycle filament or failed prints in a creative way

Buy a second 3D printer for work, home or makerspace

Print in Nylon or ASA material

3D Model something and upload it under an Open Source licence

Try a different Slicing Software

Try acetone smoothing an ABS printed part

Print something in metal or metal-like material

Get 3D scanned and print a model of yourself

Design, print and assemble something with multiple parts

Mod your 3D printer with something 3D printed

Print something that makes a noise

Visit your local makerspace

Use heat set threaded inserts in a part

Accidentally break a print while removing support material

Make a CAD Model of your room, work or home

Iterative design: Print something again after making improvements

Sell something you've 3D printed

Reverse engineer something in CAD software

3D Model 10 Models

Teach a friend how to 3D Print

Repair something that's broken with 3D printing

Create a model in an engineering software
eg. Fusion 360, FreeCAD, Solidworks or others

Print in flexible TPU material

Print something that requires more than 1kg of filament

Upload a remix of a 3D model

Print a tool of some kind

Make a lithophane from a photo or image

Print in ABS material

Embed electronics, magnets or something else inside a 3D print

Print in two colors or materials

Have a spectacular print failure, with lots of spaghetti

Edit an existing model and print

Print something functional

Print in PETG material

3D print something on fabric

Do a hot pull and cold pull cycle to unclog a nozzle

Model and print something that solves a problem

Print a model with tree supports

Print 10 Models

Use 3D Builder to help you prepare a model for printing

Create and 3D print a model in TinkerCAD

Use spiralise or vase mode to print something

Create and 3D print a model in MeshMixer

Have a failed print and fix the problem

Change a nozzle for the first time

Print an articulating or print in place model

Print something from Thingiverse

Print something from MyMiniFactory

Create something from Customizer on Thingiverse

Print a Benchy or Cali Cat

Print something from Printables

Print something from Cults3D

Print in PLA material

Print a gift for a friend or family member

Use a resin printer for the first time

Put on your first 3D Print

Use an FDM printer for the first time

Learn how to level your print bed manually

BASICS

START HERE

1 tile = 1 point

Total Score

Name: _____

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