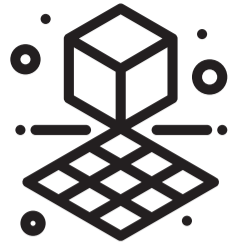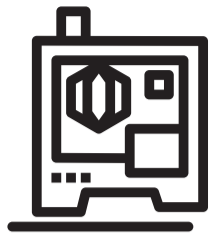# KIDS STEAM SKILLS

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)

- Design and 3D print something with electronics
- Create something to address one of the Sustainable Development Goals
- Design, print and assemble something with multiple parts
- Enter a STEM or Robotics competition, eg. Robocup
- Learn a vector artwork software, eg. Illustrator, Affinity or Inkscape
- Do a wearable tech project
- Make a line following robot
- Create a model in an engineering software eg. Fusion 360, FreeCAD, Solidworks or others
- Make a robotics project
- Teach a friend a skill from a tile you've completed
- Use a sensor in an Arduino project
- Learn how to hand embroider or cross stitch
- Make a project with a Raspberry Pi
- Use a laser cutter
- Make something using a sewing machine
- Contribute to a big project
- Use a green screen in a video
- Create a flip blook
- Use a vinyl cutter for a project eg. Cricut, Brother Silhouette
- Design and 3D print something
- Create an animation or stop motion video
- Measure voltage with a multimeter
- Control a servo motor with Arduino or Microbit
- Control multiple LEDs with Arduino or Microbit
- Learn different types of hand stitching
- Learn how to knit, crochet or weave
- Hand sew on a button
- Make a circuit that includes a button or switch
- Make an automata of your own design
- Control an Arduino or Microbit with Scratch
- Blink an LED with Arduino or Microbit
- Craft a car with wheels that move
- Make something to fix a problem
- Make something special for a friend
- Make something out of timber
- Learn to use a soldering iron
- Make a pop-up card
- Learn to use wire strippers
- Fix something that's broken
- Prototype something in cardboard
- Record & edit a video
- Make a model from a sketch in TinkerCAD
- Learn to plot data on a graph
- Make a simple game in Scratch
- Get a circuit wrong and try again
- Take apart some e-waste and see what's inside
- Simulate code in TinkerCAD
- Complete an obstacle course with a robot eg. sphero / Lego mindsorms
- Learn the difference between parallel and in-series circuits
- Make something with origami
- Do an activity in Scratch Jr.
- Make a circuit with a motor
- 3D print a model from Thingiverse or Printables
- Use folding and cutting to make a paper snowflake
- Make something that moves with Lego
- Learn to use a breadboard
- Make something from upcycled materials
- Make a kite that flies
- Make something with layers of paper
- Learn to edit a photo
- Navigate a Beebot around at least 4 objects
- Learn to use a box cutter safely
- Make a 3D object from a net
- Make a circuit that lights up an LED
- Make something with popsickle sticks
- Learn to score card with a ruler
- Learn to use cutting tools safely
- Use a mitre box to cut timber to size

1 tile = 1 point

Total Score

START ⋮ HERE

Name: _____