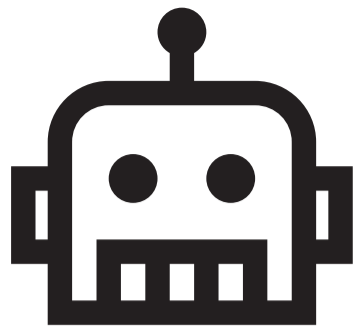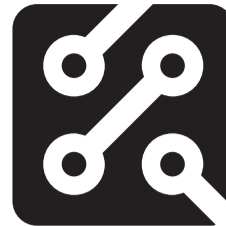# ROBOTICS

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)

- Make a waterproof robot
- Build a robot that can recognize voice or guesture
- Participate in a robotics competition
- Make a tutorial on a robot project
- Teach a class on robotics
- Build robots that can work together
- Use machine learning in a project
- Make a robot that can balance
- Design a custom PCB for a robot
- Solve a problem with a robot build
- Make a robot with metal parts
- Use soft robotics in a design
- Build a battle bot in a team
- Build a pick and place robot eg. LumenPnP
- Join a robotics club or group
- Build a drawing machine
- Build a drone
- Build a robot with lidar
- Use kinematics in a project
- Make mods to an off the shelf robot or part
- Contribute to an open source robotics project
- Build a 3D printer
- Build an autonomous robot
- Make a robot dance
- Simulate your robot in software eg. Gazebo or V-REP
- Build a floating robot
- Build a racing robot, eg. Donkeycar
- Build a large open source robot, eg. InMoov
- Use an LED matrix or screen in a robot
- Build a robot with a camera
- Teach a friend a robotics skill
- Rebuild a robot after it breaks
- Use upcycled e-waste in a project
- Program a robot with the Robot Operating System
- Use pneumatics in a build
- Send commands wirelessly
- Visit a robot restaurant
- Read a book or attend a workshop
- Build a fighting robot e.g. Sumo or Battlebots
- Use OpenCV in a project
- Build a companion robot
- Use a PID controller in a project
- Build a line following robot
- Make a CAD model of a robot project
- Build a robot with wheels or tracks
- Write software to run on a robot
- Use a game controller in a project
- Use a PID controller in a project
- Calibrate a robot build
- Use an IMU in a project
- Build a Petoi or similar
- 3D print a robot part
- Program a robot arm
- Build a biped robot eg. Ottobot
- Learn a CAD software
- Use an infrared sensor in a project
- Use an ultrasonic sensor in a project
- Use Raspberry Pi in a project
- Learn to use a multimeter
- Build a robot with more than one motor
- Learn about pwm control
- Learn to use a 3D printer
- Blink a light with Arduino
- Make a cardboard robot
- Control a servo motor
- Learn to use a soldering iron
- Make a cardboard automata
- Build a robot from a kit
- Learn about different kinds of motors

START : HERE

1 tile = 1 point

Total Score

Name: _____

Icons by Icons8.com