



Data and Sustainability Challenge

Design and build a smart sustainable home.



DEADLINE TBC



Challenge Instructions



- 1. Choose Sustainable Features for your house
- 2. Create a plan of your house including the sustainable features.
- 3. Create a program(s) for the micro:bit to incorporate into your prototype house.
- 4. Build your prototype out of upcycled materials
- 5. Film/Photograph your finished house and add these to the submission template.

Micro:bit Programs (to use/adapt)



Lighting

- Night Light
- Disco Lights
- Clap Lights
- Remote Lights
 <u>Transmitter/Receiver</u>

Data

- Max-Min Thermometer
- Indoor Outdoor
 Thermometer
- Sound Logger
- Environment Logger

Automation

- Alarm Clock
- Security Beacon
- Door Alarm
- Magnet Door Hello
- Activity Picker
- Proximity Beacon
- <u>Tilt Alarm</u>
- Radio Door Alarm

