

## **Builder**

1. Design a model of something you would like to build
  - a. This could be done on paper or on a computer
2. Make a list of things you are going to need to build your idea
  - a. Think about what the materials you will need (e.g. paper, bottles) as well as the tools (e.g. scissors, glue)
3. Build your idea using the things you need. Your model could be made using building blocks, gears, or recycled items such as toilet roll tubes or cardboard boxes
  - a. You could also use materials such as Lego or Meccano
  - b. Here are some ideas of things that you could build:
    - i. A vehicle with wheels that you could race against other people
    - ii. A robot
    - iii. A mini garden for a creature, maybe in a shoebox or out of paper mache
  - c. Take a picture
  - d. Explain any special features that it has
4. Make a note of how long your build took to finish, if anything went wrong, and what you would change if you built it again

**Enjoy!**

**Send any work that you do for this badge to [14thbroadstairs+beavers@gmail.com](mailto:14thbroadstairs+beavers@gmail.com)**

**Any questions, use the same email address, or for parents; post in Facebook, or message a leader.**

**There are some extra activities which you could do on the next page!**

## Activities

### Robot Runway

You will need:

- Clean items of recycling
  - PVA glue
  - Sticky tape
  - Paper
  - Pens/pencil
  - A selection of random objects (e.g. pencil, plastic bowl)
1. Using some paper and a pen/pencil, design a robot
    - a. Think about what you would like it to look like, what functions it might have and whether it has any special skills
  2. Make a list of the things that you will need to be able to build your robot
    - a. It might help to label each section of your design and then write a separate list
  3. Use some recycling materials, as well as any other materials, to build your robot
    - a. For an extra challenge, try to add moving parts – how about a head that swivels or an arm that lifts
    - b. You could also use building materials like Lego or Meccano
  4. Think of a name for your robot
    - a. The name could reflect the robot's powers or skills