



Hi, Mr Halliburton here
and this is my EYFS
"Computing Challenge"

"Human Robot"

This is an "Unplugged"
activity - no computer
needed!

Human Robot - Overview of activity

In this activity, children will learn to create and sort a sequence of instructions (algorithms) to program their Human Robot to move.

What will your child/children learn?




Algorithms – An algorithm is a precise sequence of instructions, or set of rules, for performing a task.

Debugging – Debugging is about finding out what is wrong in an algorithm or program and fixing it.

Programming – Programming is the process of designing and writing a set of instructions (a program) for a computer in a language it can understand. This can be simple, such as a program making a robot toy trace out a square, or incredibly sophisticated, such as those behind search engines and weather forecasting.

The behaviours **creating, persevering, collaborating** and **tinkering** (changing things to see what happens), are approaches to learning that are encouraged throughout our home activities.

Materials you will need:

-  At least two humans!
-  Printed direction cards or just use your voice to call out instructions
-  Optional home-made robot hats or masks

Human Robot - Instructions

- 1) Explain to your child/children that they are going to be controlling a “robot” to move – and that robot is you! Firstly, you are going to control your child/children to move as if they are robots. If you are using hats or masks ask them to put them on.
- 2) Using the printed direction cards, show the forward arrow and ask what this arrow might mean. Model the action by stepping forwards one step and saying “forwards”. Ask your child/children to copy you and repeat the word if they can.
- 3) Repeat with the other directional cards, emphasising that the right and the left turns are quarter turns on the spot.
- 4) Explain: An algorithm is a sequence of instructions to get something done.

Extension tasks

- Can your child make a sequence of instructions for the robot by sticking the arrow cards on the wall, floor or chalk board etc in the right order?
- If you have the space, you could use masking tape to create a grid. Place objects in the squares of the grid for your robot to find. You could add in objects that have to be avoided. You could also chalk a grid outside and use garden objects.
- Explore robots as a theme: create a robot outfit for a favourite toy, build a robot out of small building bricks or junk modelling, watch a film such a WAL-E or have a look at the Honda robot Asimo together on YouTube.

Try this [Beebot online activity](#), or search for the Beebot app for [Android](#) or [Apple](#).

Human robot direction cards

Step
forward



Repeat x 2



Step
forward



Step
backward



Repeat x 2



Step
backward



Turn
right



Repeat x 3



Turn
right



Turn
left



Repeat x 3



Turn
left

