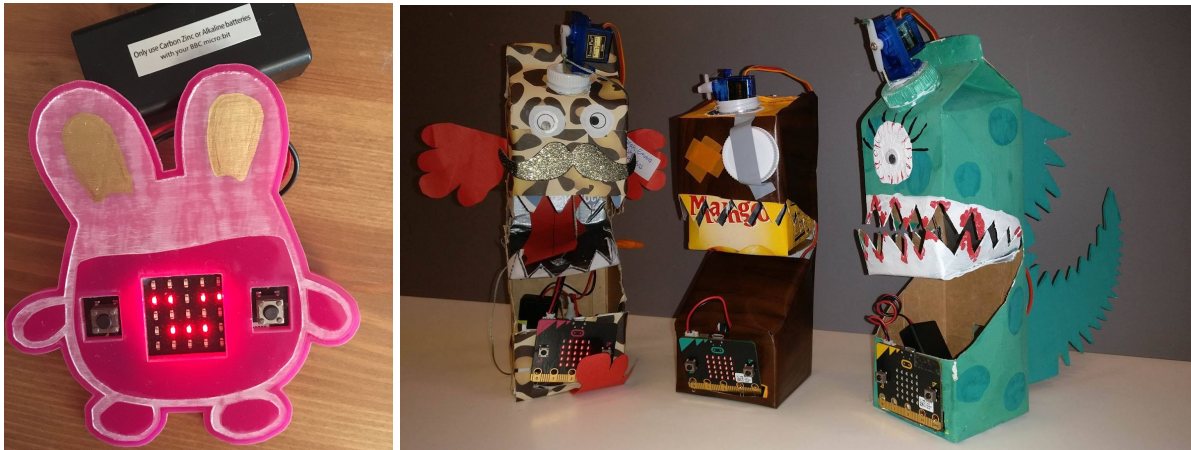


# MicroBits Tamagotchi Challenge



## **Aim: Make a Tamagotchi**

Start by learning some MicroBit features:

1. Can you code a game of Rock, Paper Scissors (learn Shake and Random)  
<https://www.microbit.co.uk/blocks/lessons/rock-paper-scissors/activity>
2. Can you make that Rock, Paper Scissors game multiplayer? (learn Forever Loop and Radio Communication) <https://makecode.microbit.org/projects/rps-teams>

Next complete the MicroBit Digital Pet Tutorial:

<https://www.microbit.co.uk/td/lessons/digital-pet/tutorial>

(Learn Input → Condition. Learn how to create a Function and display Image. Learn Pause.)

## **Now using these skills, can you create your own monster or pet?!**

**Challenge 01:** Can you program it to have several faces for several emotions/needs?

**Challenge 02:** Can you program it to tell you it's hungry and needs feeding after a set time, say, 60 seconds? (Hint input → running time)

**Challenge 03:** Can you program it to need exercise, so you have to talk it for a walk of, say, 25 paces? (Hint shake feature)

**Challenge 04:** Can you program it to respond to another MicroBit as though they were friends? (Hint radio communication)

**Challenge 05:** Can you make it move?

(<https://makecode.microbit.org/projects/milk-carton-robot> Learn how to connect servo, light sensor, build a movable body)