

LKS2 Worksheet: Design and Test a Healthy Lunch-Bot Algorithm



Now let's practise designing and testing algorithms!

There's a grid below representing the kitchen, with some food items to collect that are okay for today's healthy lunch, along with some items that are not okay for today's healthy lunch to miss out. Can you use arrows to write an algorithm that will guide your robot to collect all the okay items, and then go back to the 'start' again?

- Use the 'whiteboard' below the grid to write your arrows on – we've started by drawing the first two for you (turn right on the spot and move forward the direction the robot is facing). Test the algorithm by drawing a line to show the robot's path.



Directional
arrows
reminder

↑ Forward

↶ Turn left

↷ Turn right



Create your own challenges!

- Next, print and cut out the grid and templates and make up your own challenges. You can write down your algorithm using paper and pencil, a whiteboard and pen if you have them, or print and cut out the arrows below.
- Then you could try printing this page out again and taping two grids together for an even bigger challenge!

