

5TH AND 6TH CLASSES: USING GRAPH PAPER PROGRAMMING TO PROBLEM SOLVE

BACKGROUND

The children are being introduced to coding through this unplugged activity.

They are introduced to basic coding concepts like symbols, sequencing and algorithms in a fun and accessible way.

They are already very familiar with following procedures, giving and following instructions, problem-solving and working in pairs and groups.

TASK

With the children working in pairs, the teacher demonstrates a set of written symbols for the following commands: → Move right, ← Move left, ↑ Move up, ↓ Move down, X Colour in.

One child is given the instructions worksheet; <https://studio.code.org/s/course2/stage/1/puzzle/1>
This child is the programmer. Another child is given a worksheet with a number of blank 4x4 grids. This child is the robot and follows the commands given by the programmer to complete the task.



CHILDREN'S WORK

The children then compare their pictures at the end of the instructional process. If the pictures are not the same the children must rerun and debug the algorithm in order to find a solution.

The children may swap roles and repeat the activity with a new picture.

