

## Marching Orders

**Algorithms** are a group of instructions written by the programmer to tell the computer what to do. Computers cannot think on their own, so a human must write clear instructions in order to get the computer to carry out the desired outcome.

Sometimes humans need to give instructions to other humans. If someone asked you to go out the door, you would use your human brain to assess what kind of door it is, and you would know how to operate it—turn knob, crash bar, push or pull. If you had a computer brain, you might try to go right through it unless you were programmed to use certain types of doors.

Check out this video of a parent trying to follow the instructions for a simple task, written by his children: [Josh Darnit Exact Instructions Challenge](#).

Your Task: Play the Marching Orders Game

The objectives of Marching Orders are

- a) to create/communicate clear programming instructions for a computer to follow,
- b) listening and following instructions.

### Instructions

- You will need Player A and Player B
- Player A creates a simple design (a doodle, a small Lego creation, a pattern with blocks, etc)—this design must be kept HIDDEN from Player B!!
- Player A verbally describes their design, while Player B follows the instructions and tries to recreate it (\*make sure there is enough materials for Player B to use, too!)
- Both Players reveal their designs—were they the same? Similar? Way off?
- Switch roles and play again!