Moving a robot

Year 1 Computing | Knowledge organiser

A floor robot follows the commands we give it, in order.

Robot commands

Forwards

Move ahead a fixed distance.

Backwards

Move back a fixed distance.

Turn left

Make a quarter turn on the spot.

Turn right

Make a quarter turn on the spot.

A turn changes the way the robot faces.
It does not move the robot to another square.
Left and right are from the robot's point of view.

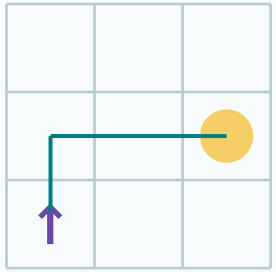
GO Go runs the commands you entered.

CLEAR Clear removes the old commands.
Clear before entering a new program.

Words to know

Command: one instruction for the robot.
Sequence: commands in an order.
Algorithm: clear instructions in the right order.
Program: commands entered into the robot.
Predict: say what you think will happen.
Debug: find and fix a mistake in a program.

Plan a route



Start facing up

Reach the yellow circle.

Each forwards command moves one square on this example mat.

Forwards • right turn • forwards • forwards

Choose the start and the way the robot faces.
Plan the commands before pressing buttons.
There may be more than one route to the goal.

Test and improve

Clear → enter commands → press Go → watch → check.
If the robot goes the wrong way, check the commands. Fix the mistake and try again from the same start.

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