

Program the Warehouse Bot

BLOCK CODING

Duration: 25 min • Grades 6–8 • Facilitator-led

Overview

Students drag and drop code blocks (move, turn, scan, pick) to guide a warehouse robot through progressively harder puzzles. Built-in hints unlock after two failed attempts.

Learning Objectives

- Write and debug a simple sequence of instructions
- Use loops and conditionals to reduce code
- Explain how algorithms move real robots

Materials Needed

- Browser device (mouse or trackpad)
- Optional: shared display for group solve

Facilitator Flow

- 1 Demo (3 min): solve puzzle 1 as a class.
- 2 Solo runs (10 min): students complete puzzles 2–5.
- 3 Loop challenge (5 min): reduce code using a loop.
- 4 Pair debug (5 min): partners trade screens and find one bug.
- 5 Reflection (2 min): 'When did you have to think like the robot?'