

Floor robot: fix the bug



Lesson at a glance

Open with the floor robot, taped grid mat and teddy in view, and ask what happens if the robot goes the wrong way. Model one short sequence with a clear bug, name the wrong arrow card as the bug, fix it and try again so the robot reaches the teddy. Drive one shared fix on the IWB interactive, then rotate small groups through send-spot-fix-try-again on the real mat with arrow cards. Close with one group naming their bug and fix.

Learning objectives

- Spot a wrong move when the floor robot misses the target
- Change the wrong step and try again so the robot reaches the target

Before the bell – prep

Tape a 3-by-3 floor grid and mark L/R on the mat edges the day before. Set out the floor robot, one target (teddy or star), and three arrow cards per active group. Clear bags and feet from the lane. No robot? A child walks the path following big arrow cards.

Materials

Item	Qty	Per	Source	Low-cost substitute
Bee-Bot or similar floor robot	1	group	school kit	a child acts as the robot and follows big arrow cards across a taped floor grid
taped floor mat with picture squares	1	group	classroom	masking-tape grid on the hall floor or carpet squares laid in a grid
big arrow cards (forward, turn left, turn right)	1	group	provided printable	draw large arrows on scrap card or paper plates
target picture cards (teddy, star or similar)	2	group	provided printable	a sticky note with a simple drawing, or a small classroom toy

Safety watch-point

Robots stay on the floor only. Keep the lane clear of bags and feet; stand clear whenever the robot moves.



Teaching moves

- **Watch me find the bug:** Think aloud a short sequence with one clear bug—prefer an extra or missing forward so success is not only left/right. When it misses, hold the wrong arrow card beside the robot and name it: this wrong step is our bug, not an insect. Change that one arrow, press go, and celebrate the reach. Fold the class in: Was that step right? Which arrow would you change?
- **Re-plan the route:** On the IWB interactive, build a short wrong path first so the first run clearly misses. Before run, stand by the real robot and match board facing to floor facing against the L/R markers. Children call which command to change; you drag and run once. Celebrate one clear fix, then move straight to the floor mats—no scores, no race.
- **Send, spot, fix, try again:** Rotate short bursts: one small group active (card layer, button presser) while watchers sit on the carpet edge. Keep sequences to three steps and one bug. After the miss, ask watchers which card to change; group swaps only that card and tries again. Celebrate the fix, not a perfect first try. Swap jobs or groups after each cycle.
- **How did we help the robot?:** Two to three minutes on the carpet. One group only uses the stems: The bug was... We changed... Then the robot... Revoice a second fix you saw circulating. Add one line: that is the same job robot makers do.

What it should show

Success is a child pointing to the wrong arrow card, the group changing only that step, and the robot getting closer or reaching the teddy. Celebrate the fix, not a first-try hit. If the robot still misses after a 'fix', check the buttons match the laid cards and that left/right match the mat markers—screen and floor facing often drift for infants.

Misconceptions & interventions

- **The robot is naughty or broken when it misses the teddy.** — Point to the arrow cards, not the robot: it did exactly the steps we gave it. Hold up the wrong card—the bug is in our steps, and we can fix it.
- **Bug means a creepy-crawly on the mat.** — Hold the wrong arrow card beside the robot and say clearly: not an insect—a bug means a wrong step in our arrows. Then change that card and try again.



Differentiation

Emerging	Developing	Proficient
• Pair at the teacher mat with a three-card path already laid; child only spots which single card to swap and watches the re-run. • Offer the child-as-robot substitute so the path is walked slowly with cards visible on the floor.	• After one fix, ask watchers: What will happen if we try again? before the second press. • Swap jobs so the watcher becomes card layer on the next burst.	• Ask which one card they would change and why before anyone touches the buttons. • Invite a quick fair check: did the buttons match the cards we laid?

Cross-curricular hook

Oral language: one group uses the stems The bug was... We changed... Then the robot... to retell the fix.