

ScratchJr: make it move to a goal

Lesson at a glance

Open by naming a simple screen game and what its character tries to reach. Model plan-then-snap on the IWB: sketch arrows, run a short ScratchJr sequence that deliberately misses a pre-loaded flag or fish, then fix one block and name the miss a bug. Pairs plan with arrows on scrap paper, build and fix on pre-loaded tablets, then record plan, tick/cross and one change in the Investigation Journal. Close with a short talk linking their fix to ordered steps in games.

Learning objectives

- Plan a short block sequence so a character reaches a goal
- Run the sequence and fix it if the character misses the goal

Before the bell – prep

Charge tablets and pre-load every device with one simple scene: character left, clear goal (flag/fish/star) right, no extras. Count move blocks needed and script the demo to overshoot or stop short. Scrap paper and pencils beside each tablet; one tablet per pair or IWB rotation.

Materials

Item	Qty	Per	Source	Low-cost substitute
tablet with ScratchJr installed	1	group	school kit	teacher drives ScratchJr on the IWB while pairs take turns and the class predicts and suggests fixes
Investigation Journal page	1	pupil	provided printable	plain paper with three picture spaces: plan arrows, tick or cross at the goal, draw one change
scrap paper for quick arrow plans	1	group	classroom	the back of a used worksheet or the margin of the journal page
pencils and crayons	1	pupil	classroom	any writing and colouring tools already in the room

Safety watch-point

Tablets flat on desks; chargers and leads out of walkways; gentle hands only when packing away and counting devices back in.

**Teaching moves**

- **Watch how we plan:** On the IWB scene, wonder aloud, sketch three arrows on the board, then snap START plus one too many or too few move blocks so the miss is reliable. Name what happened, change one block, re-run, and only then label the wrong or missing step a bug. Ask: plan first or tap first? If it goes past, what changes?
- **Plan, build and fix:** Reveal one board sentence at a time. Pairs point to the pre-loaded goal, draw arrows on scrap paper, then snap START and move blocks. Circulate for planning talk (right, right, up). On a miss ask too many blocks or wrong direction? Keep START snap distinct from tapping GO. Stretch only for confident pairs: a turn, hop, or waiting second character.
- **Record our sequence:** Tablets down first. Guide three picture-first journal ideas only: arrow plan, tick or cross at the goal, and one simple mark for what they changed. A miss still counts—record what happened and the next try. About seven minutes, then pencils down.
- **Steps on a screen:** Lead with one pair's concrete fix story, then ask whether planning first helped. Revoice into plan, sequence, goal, bug, fix. Anchor back to the game example named at the start before saying screen games follow ordered steps too.

What it should show

Most pairs reach the pre-loaded goal after one or two fixes—adding a block when short, removing one when past, or swapping direction. Common first-run misses: missing green-flag START, unsapped blocks, wrong direction, or wiping the whole chain instead of changing one block. Affirm the fix; success is plan + run + one sensible change, not a perfect first try.

Misconceptions & interventions

- **More blocks are always better — a long chain will get there somehow.** — Point at the overshoot on the demo scene: the right number in the right order beats a long chain. Have them remove one block and watch it land on the goal.
- **When it misses, delete everything and start again.** — Stop the wipe. Ask too far, too short, or wrong way? Change only one block, re-run, and celebrate the single fix.
- **Tapping blocks without a plan, or mixing up the green-flag START block with tapping GO.** — Send them back to the scrap-paper arrows first. Coach: snap the green-flag START block at the front; tap the green flag to GO only when ready to run.

Differentiation

Emerging	Developing	Proficient
• Sit at the teacher table with a partly planned arrow sketch already started; coach snap START then one or two move-right blocks only toward the pre-loaded goal.	• After a straight reach, ask why that number worked and whether one extra or fewer block would miss — re-run once to check.	• Add a turn, a hop, or a short second character waiting at the goal; still plan on scrap paper before tapping.

Cross-curricular hook

Links to Maths: ordered steps and positional language (left, right, up) as pupils count and sequence moves to the goal.