10 · Project sheet · Route Games

Robot / Maker Lab practical · Nursery 1 · Term 3 · Week 7 · Practice & Play

1. At a glance

Time	40 minutes (three stations, about 8 minutes each)
Group size	Teams of 3 (card-layer, robot, checker)
Learning goal	I can move Ayo with 3 cards and fix a wrong card.
Coding idea	A program is cards in order; one card, one square; find and fix a swap.
Week link	https://rhinoxscientifica.com/q/n1-t3-w7

2. Materials needed

Item	Per	Low-cost swap
3×3 taped grid	station	Chalk squares or paper sheets
Forward, stop, go-round cards	team	Hand signs
Box market stall	station	A chair with the stall sign
Light road-closed box	station	A cushion
Cut-out Ayo	team	A toy
Step Star stickers	child	Washable marker star on the hand

3. Safety and care

- Tape flat, no trip edges.
- Walk one square at a time.
- Road-closed box is light and empty.
- Leave space between grids.

4. Before the lesson

1. Tape three grids; mark START; put the stall on FINISH.
2. Print signs, cards and the checklist.
3. Read the lesson spec the evening before and lay out the cards.

5. Step-by-step guide

Step	Teacher says	Children do
1	“Card-layer: lay forward, forward, stop.”	Lay 3 cards
2	“Robot: one square per card!”	Push Ayo to the stall
3	“Checker: point to each card.”	Check the cards
4	(Partner swaps two) “Silly Ayo! Fix it.”	Find and swap back two cards
5	(Road-closed box) “Now what?”	Swap in “go round” and test

Step	Teacher says	Children do
6	“Swap jobs and go again!”	Rotate roles

6. Explore it

Question	How do we know our cards are right?
Predict	“Will Ayo stop at the market?”
Try	Run the cards: one square per card.
Observe	“Where did Ayo stop?”
Explain	If Ayo stops at the market, the cards are right. If not, find the wrong card and fix it.

7. Talk about it

1a. Which cards did you use?

1b. How many squares did Ayo move?

1c. Which two cards were swapped?

2a. What did you do when the road was closed?

2b. Which job did you like best?

2c. Can you make a longer route?

8. Support and stretch

Support	Start with forward, stop and one square.
Stretch (optional)	4–5 card routes or a “do it again” card. Never assessed.

9. How we check

Observation only, not marked.

Look for	Secure	With prompts	Not yet
Lays a 3-card straight route	☐	☐	☐
Runs it (one square per card)	☐	☐	☐
Swaps back two swapped cards	☐	☐	☐
Finds another way (go round)	☐	☐	☐

10. Take-home and parent note

> **Dear parent or carer**
> Today we played **route games**: we moved Ayo with picture cards and fixed mixed-up cards.
> At home: make a 3-square path to a toy and say “forward, forward, stop!”

11. Show and share

- Teams show their route to the market stall.
- Everyone says: “Forward, forward, stop!”
- Every child who moved Ayo and fixed a card gets a **Step Star sticker**.



The Step Star is a weekly sticker, not a badge. The term badge “Step Thinker · Term 3” is awarded in Week 13.