Think • Move • Code!

Nursery 1 · Term 3
Printable card pack

All the cards, mats and sheets for Weeks 1–13 in one file. Print on card if you can; an adult does all the cutting. Laminate cards you use every week.



Problem spotter cards

One set per group. Point to what is wrong and say “The problem is...”



blocked path



spilled water



broken toy



danger sign

No-problem cards (mix these in)

"Is there a problem here? How do you know?"



clear path



full cup



toy car



open door

Problem acting cards

A child picks a card and acts it; the class says the problem.



shoelace undone



door shut



water spilled (empty cup!)

Say it! signs

Hold up while children speak: first the problem, then help.



The problem is…



Who can help?

My problem and who helped me

Draw a time you had a problem and who helped you. Name: _____

Shop-trip step cards

One set per group. “Pay” is the Stretch card.



leave home



buy bread



go home



pay (Stretch)

FIRST–NEXT–LAST strips

Say the steps first, then lay the cards.

1 FIRST	2 NEXT	3 LAST
put a card here	put a card here	put a card here

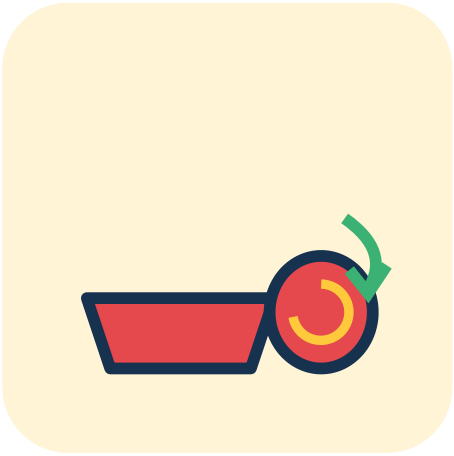
1 FIRST	2 NEXT	3 LAST
put a card here	put a card here	put a card here

Practical life: roll a mat

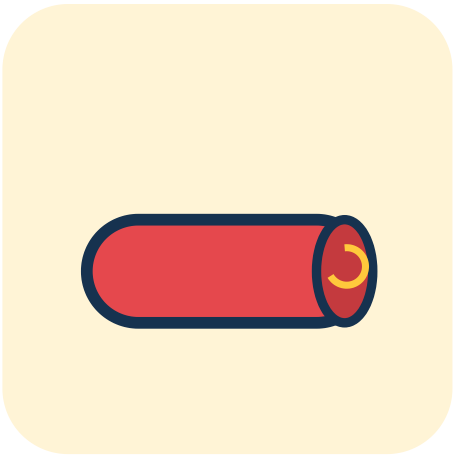
Say the steps, lay the cards, then roll the mat.



flat mat



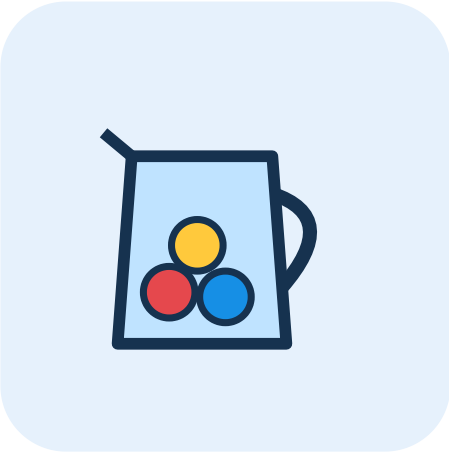
roll it up



rolled up

Practical life: pour the counters

Counters bigger than a toilet-roll opening. Count them in and out.



jug with counters



pour slowly



counters in the bowl

My job in small steps

Draw the small steps of a job you do (e.g. washing your plate). Name: _____

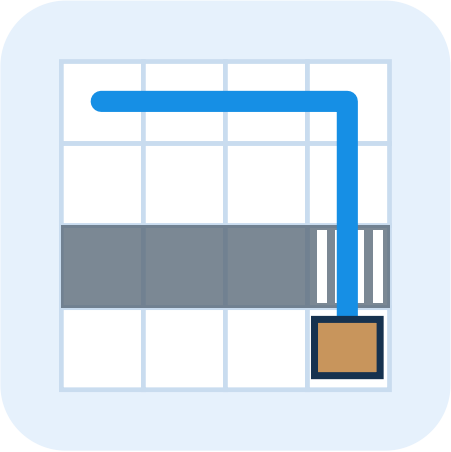
1 **first**

2 **next**

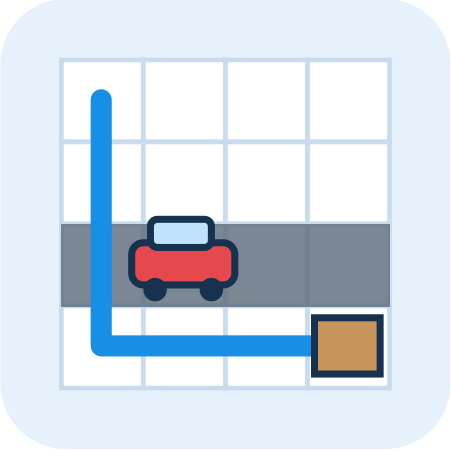
3 **last**

Two-route mats

One per pair. Point to the safe route, then trace it with a finger.



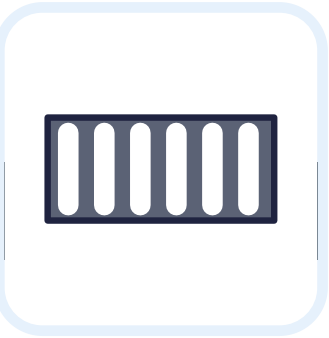
route A



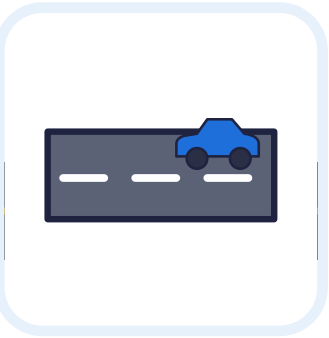
route B

Choice cards: road

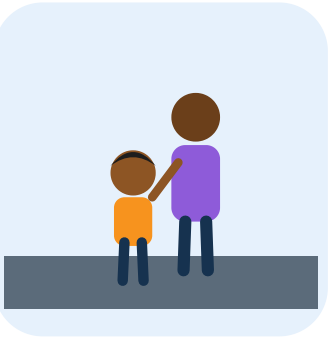
Cut in pairs. Which one is safe? Hold up thumbs-up!



zebra crossing



busy road



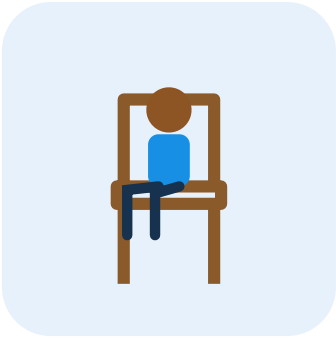
with a grown-up



on my own

Choice cards: classroom + thumbs-up

Cut out. One thumbs-up card per pair.



sit on the chair



stand on the chair



safe way!



safe way!

Paper zebra crossing (optional Build)

Print 2–3 copies and tape them in a row across the “road” on the floor grid.



The safe way to cross the road

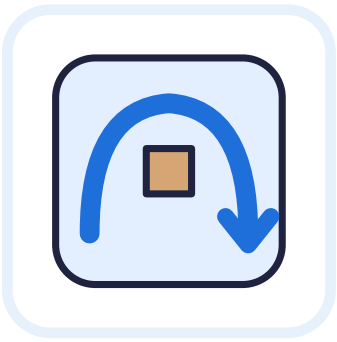
Draw yourself crossing the road the safe way. Name: _____

New cards: walk straight and go round

Add these to your command cards. When the road is closed, swap “walk straight” for “go round”, then test it.



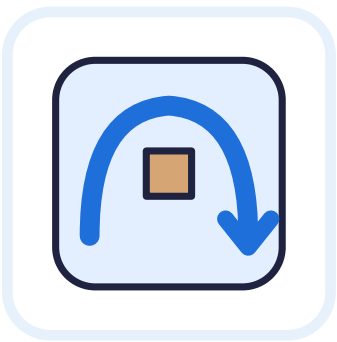
walk straight



go round



walk straight



go round

Road closed sign

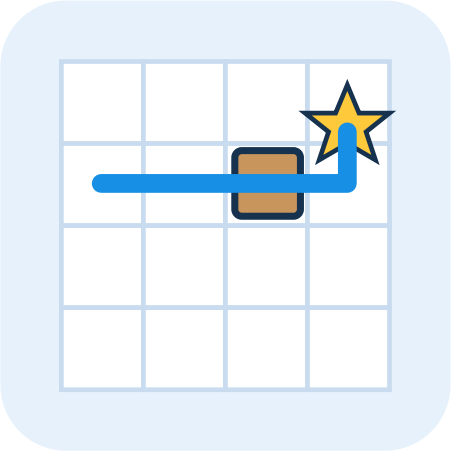
Stick on a light, empty box. Put it on the taped route.



ROAD CLOSED

Blocked-path mats

One per team. Trace a way round the box to the star with a finger.



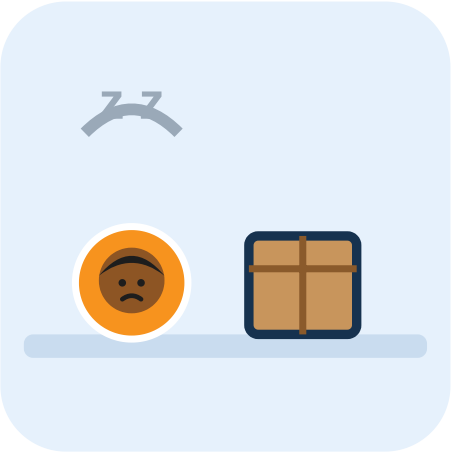
blocked: find a way round



one way

Choice cards: give up or try again?

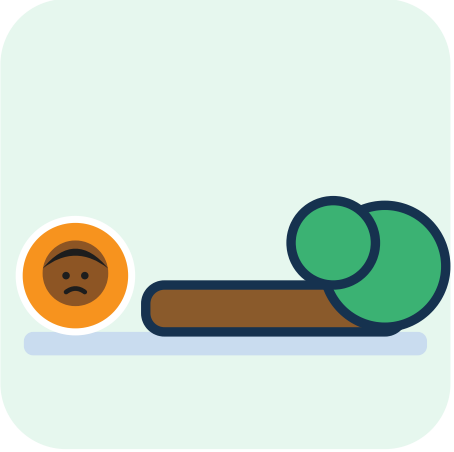
Pairs point to the good choice.



give up



try another way



a tree is in the way

Ayo goes a different way

Draw Ayo going a different way round the block. Name: _____

Build card: a bridge for Ayo's car

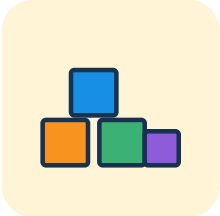
One per group. The teacher reads each step.

1



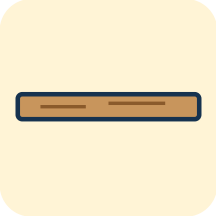
Lay the blue paper river

2



Put big blocks on each side

3



Put the plank on top

4



Test: push the car across

5



It fell? Change one thing

6



Test again! Name your bridge

Build plan strips

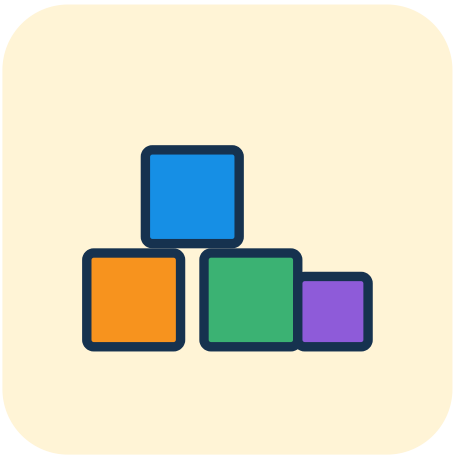
Lay the plan cards: blocks → plank → test. Then follow the plan.

1 FIRST	2 NEXT	3 LAST
put a card here	put a card here	put a card here

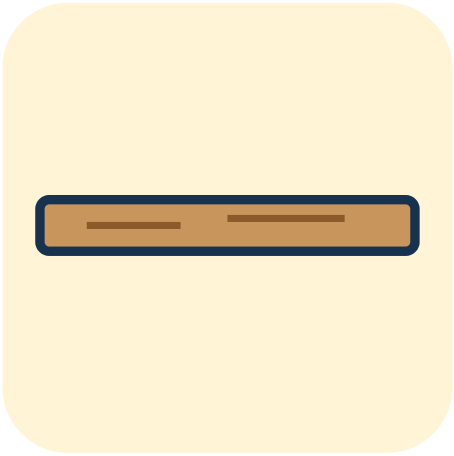
1 FIRST	2 NEXT	3 LAST
put a card here	put a card here	put a card here

Plan cards

One set per group.



blocks



plank



test

Push, pull, roll cards

Hold up the card as children push, pull and roll.



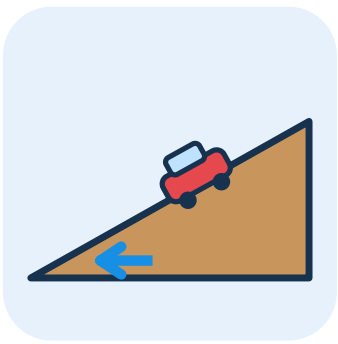
push



pull



roll



ramp

Bridge name card

Cut out. Children name and decorate their bridge.

Our bridge is called

_____

Built by: _____

Our bridge is called

_____

Built by: _____

IF and THEN header cards

Put IF on the left and THEN on the right. Lay picture cards under them.

IF

IF

THEN

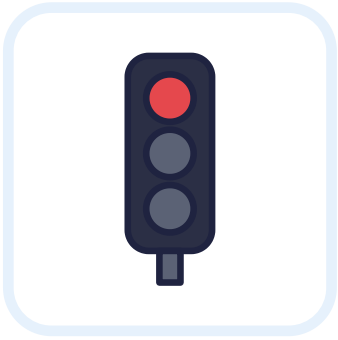
THEN

IF cards

One set per pair.



if it rains



if the light is red



if it is dark



if it is sunny

THEN cards

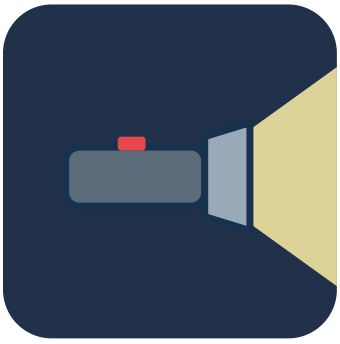
Match each to its IF card.



then umbrella



then stop



then torch



then sun hat

Button game cards

Red = stop · green = walk · rain = umbrella hands. Optional Build: colour and cut your own.



red: stop



green: walk



rain: umbrella hands



umbrella hands

If it rains, I...

Draw what you do if it rains. Name: _____

Route-game station signs

Three stations. Teams of 3 move on two claps.

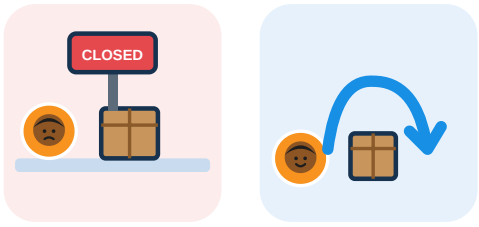
A Grid robots



One square per forward card. Freeze on stop!

Replays T1 W9 · Core: Move

B Road closed



Road closed! Swap in go round and walk it to test.

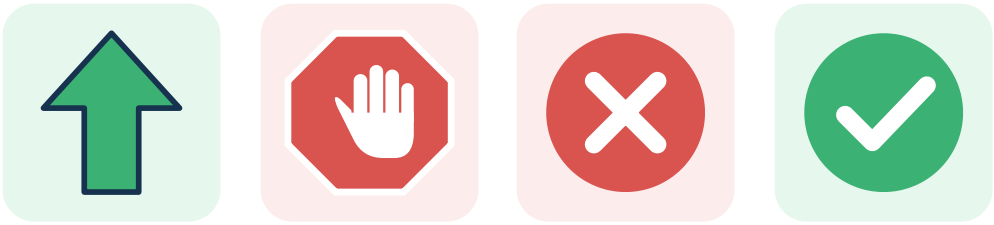
Replays T3 W4 · Core: Move

Route-game station signs

Three stations. Teams of 3 move on two claps.

C

Card route + swap back

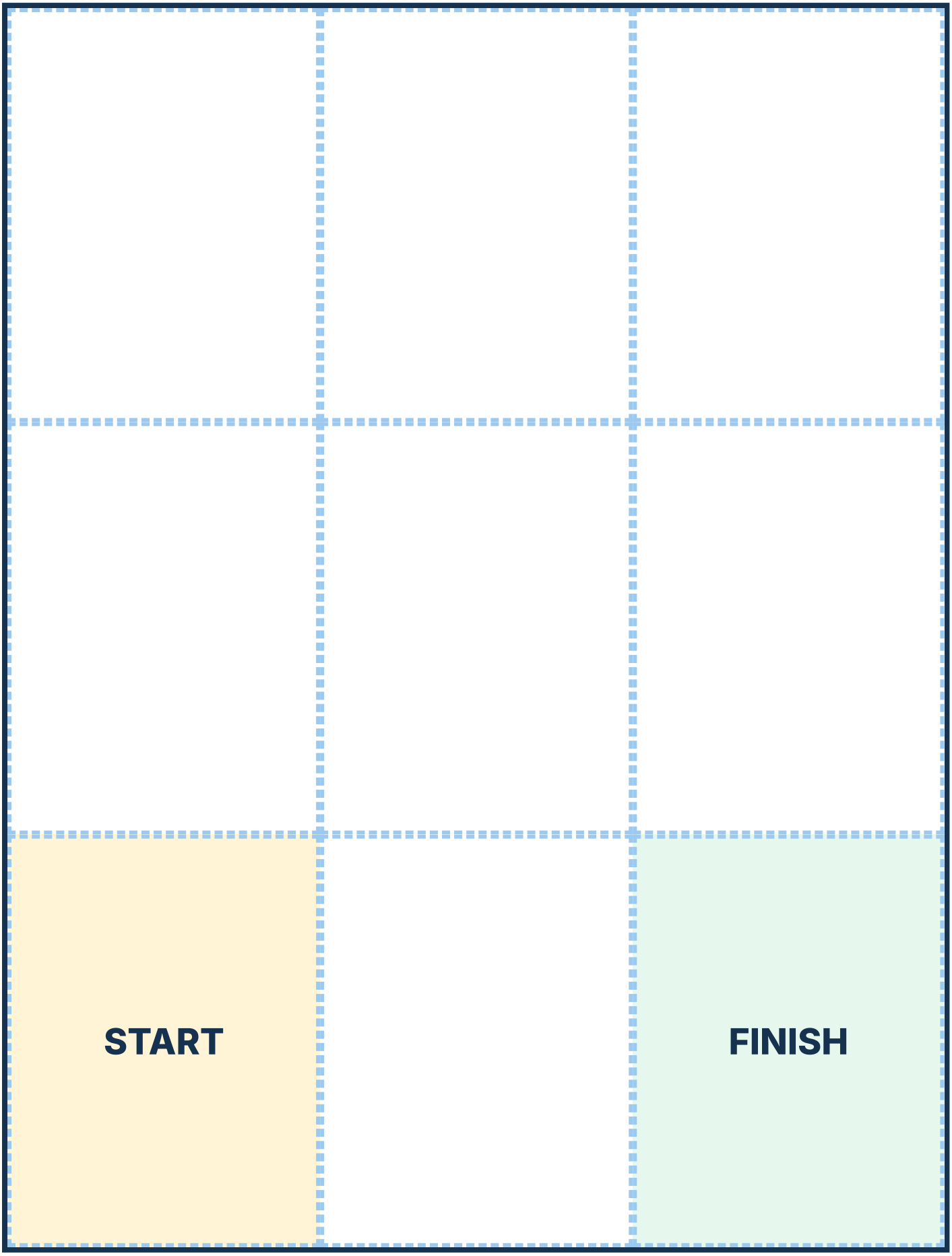


Lay 3 cards to the market. A partner swaps two: swap them back!

Replays T1 W9 + T1 W5 · Core: Code · Teacher station

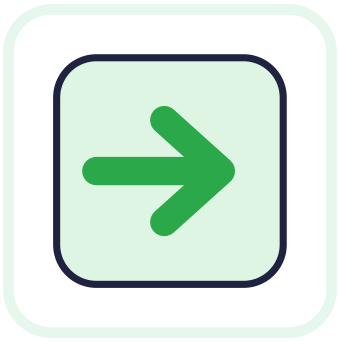
3×3 grid mat

Table version of the floor grid. Ayo starts at START; the market stall is FINISH.

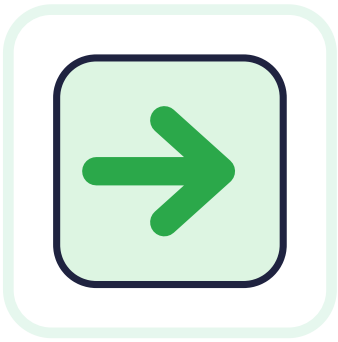


Route cards

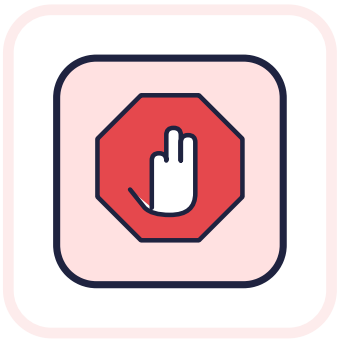
Two sets per team.



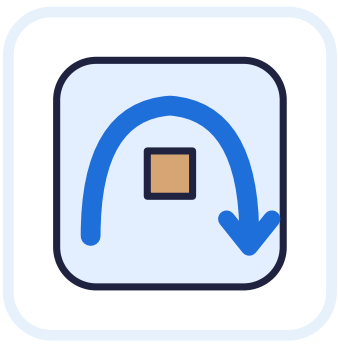
forward



forward



stop



go round

Market stall sign + road closed sign

Stick on boxes: the stall on FINISH; road closed on any square.



market stall



road closed

Ayo’s straight way to the market

Draw Ayo walking his straight path to the market. Name: _____

Course step cards

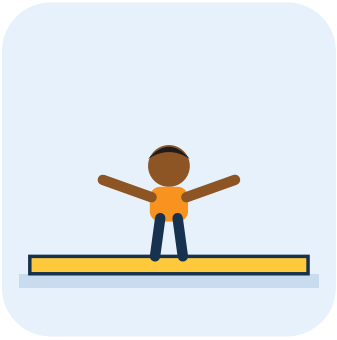
One set per team. Lay 3 on the plan card before anyone moves.



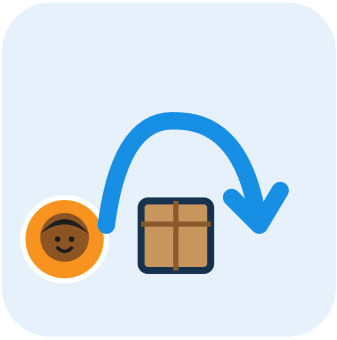
crawl under



walk around



step along the line



go round (if blocked)

Team plan card

Lay your 3 step cards here. Test with Ayo on the paper course, then walk it.

1 FIRST	2 NEXT	3 LAST
put a card here	put a card here	put a card here

1 FIRST	2 NEXT	3 LAST
put a card here	put a card here	put a card here

Paper copy of the course (sketch template)

The teacher sketches the real course here, one per table. Teams move cut-out Ayo along it.

START

Draw: the table (crawl under) · the boxes (walk around) · the taped line · the ramp

BREAD ★

Ayo with bread + team card

Stick the bread picture on cut-out Ayo. The team card goes on each table.



Ayo’s bread



our team

Our team’s obstacle course

Draw your team’s obstacle course and Ayo with the bread. Name: _____

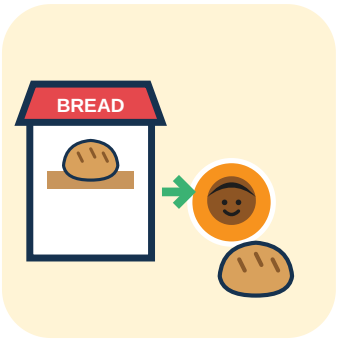
Thinking-steps poster

Put it up for Weeks 9–13. Point to each step as you use it.

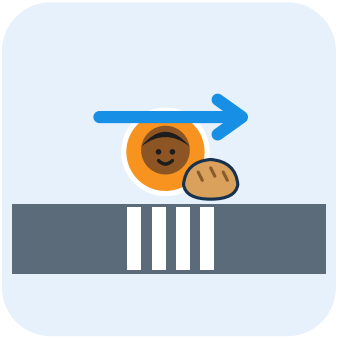
1. **What is the problem?**
2. **What are the small steps?**
3. **Which way is safe?**
4. **If…, then…?**
5. **Blocked? Try another way!**

Delivery step cards

One set per team. “Go round” is used when the road is closed.



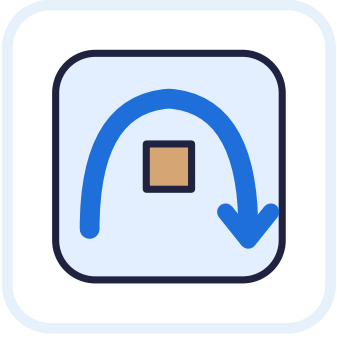
pick up bread



walk the safe way



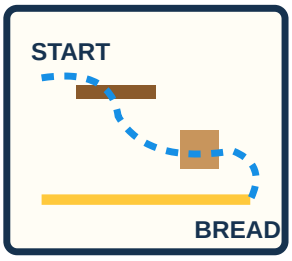
give bread



go round

Role cards

Teams of 4. Swap jobs each turn.



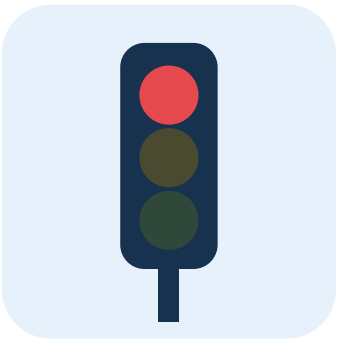
planner



Ayo



checker



light-holder

Light cards + road closed

The light-holder shows red or green. The teacher adds the road-closed box.



red: stop



green: go



road closed

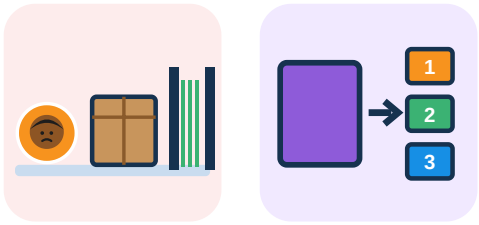
How Ayo got the bread there

Draw Ayo's way to deliver the bread to Grandma. Name: _____

Smart Review station signs

Place one sign at each station. Groups move on two claps.

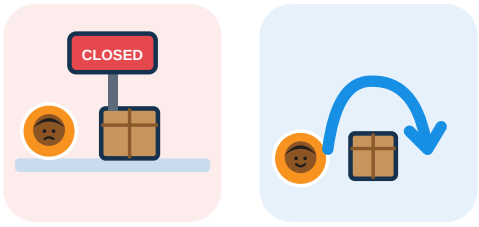
1 Break It Small



Say the problem. Lay 3 step cards for the job.

Brings back Weeks 1 and 2 · Core: Code

2 Road Closed



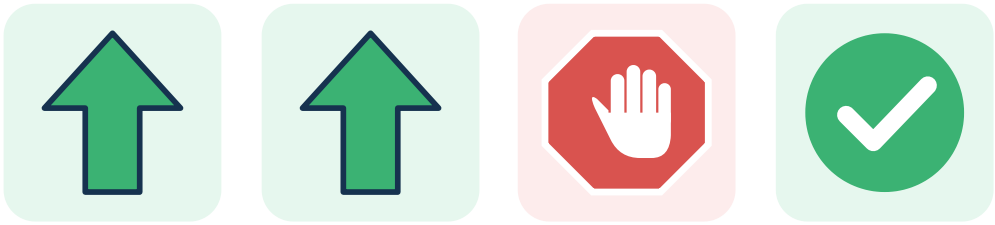
Road closed! Swap in go round and test it.

Brings back Weeks 3 and 4 · Core: Move

Smart Review station signs

Place one sign at each station. Groups move on two claps.

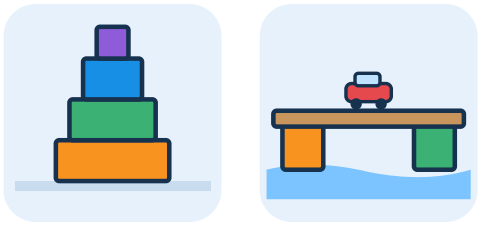
3 Help Ayo Move



Lay 3 cards from memory. The teacher swaps two: swap them back!

Brings back Week 7 + Term 1 (MVL) · Teacher station

4 Ramp or Tower



Build with big blocks. Test it. Change one thing and test again. No climbing!

Brings back Weeks 5 and 8 · Build

Station 1: problem cards

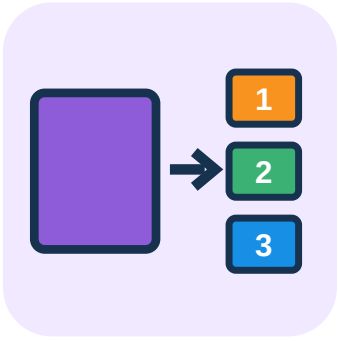
Show a card: say the problem, then lay 3 step cards.



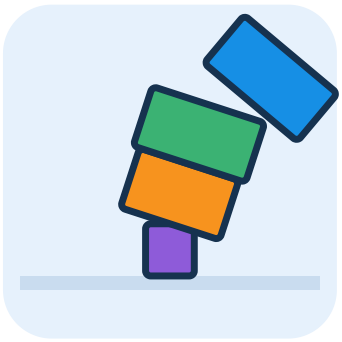
Ayo is stuck



spilled water



a big job



the tower fell

Harder station cards (Stretch, 4 steps)

Leave home → buy bread → pay → go home.



leave home



buy bread



pay



go home

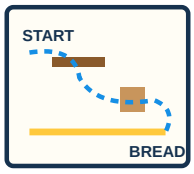
My favourite problem I solved this term

Draw your favourite problem and how you solved it. Name: _____

Build card: Ayo's Ramp and Route

One per team. The teacher reads each step.

1



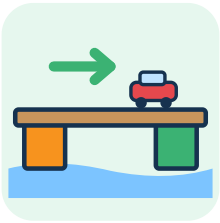
Plan: blocks → ramp → test

2



Add 2–3 big blocks to the base

3



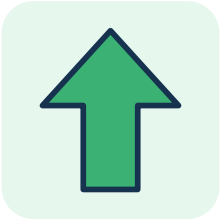
Test: roll the bread car down

4



It fell off? Add a block, test again

5



Lay forward, forward, stop to the ramp

6

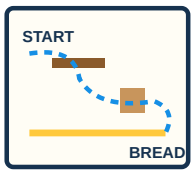


Swap two? Find them, fix them, run!

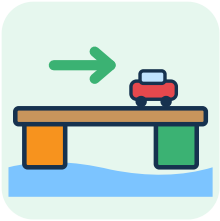
Picture build checklist

Two per page, one per team. Tick each box when you have done it. Not marked.

Our ramp and route Team: _____



plan ☐



build + test ☐

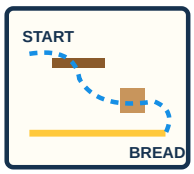


route ☐

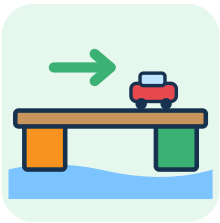


fix ☐

Our ramp and route Team: _____



plan ☐



build + test ☐



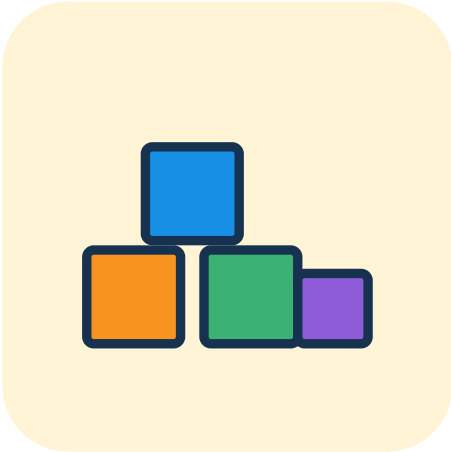
route ☐



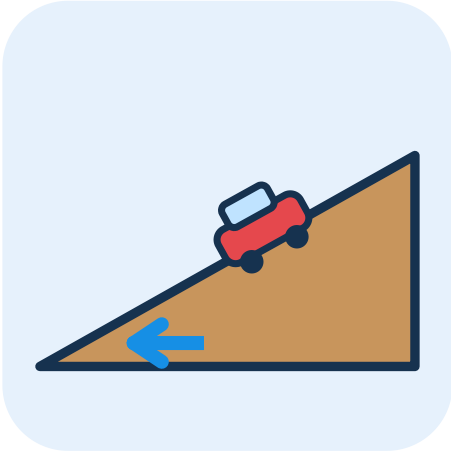
fix ☐

Plan cards

Lay these first, before building: blocks → ramp → test.



blocks



ramp



test

Route cards

Ayo's route to the ramp: forward, forward, stop.



forward



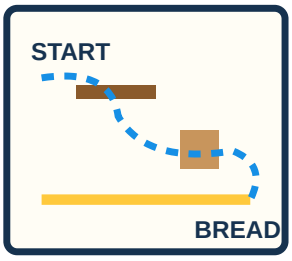
forward



stop

Role cards

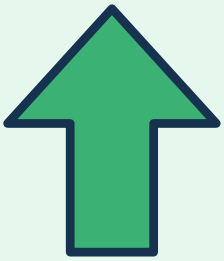
Teams of 4. Swap jobs if you build twice.



planner



builder



card-layer



checker

Our Ramp and Route team

Stick your team photo here (or draw your team) for the Week 13 showcase.

team photo or drawing here

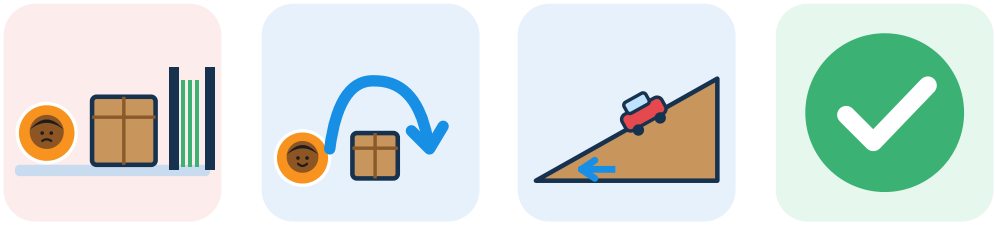
Our team: _____

Ayo's problem was _____ · we solved it by _____

Station check signs

Three stations. About 10 minutes each; two claps to move.

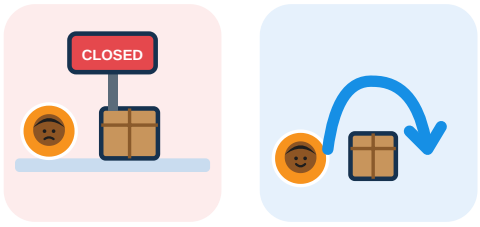
1 Thinker game with Teacher



Say the problem, try another way, fix your ramp, fix Silly Ayo's cards.

Teacher · 3–4 children at a time · about 4 minutes

2 Road closed practice



Walk the route. Road closed? Go round! Just for fun!

Assistant or self-running · not judged

Station check signs

Three stations. About 10 minutes each; two claps to move.

3

Me as a thinker



Draw yourself as a thinker, solving a problem.

Self-running

Station 1 cards: item ② and problem card

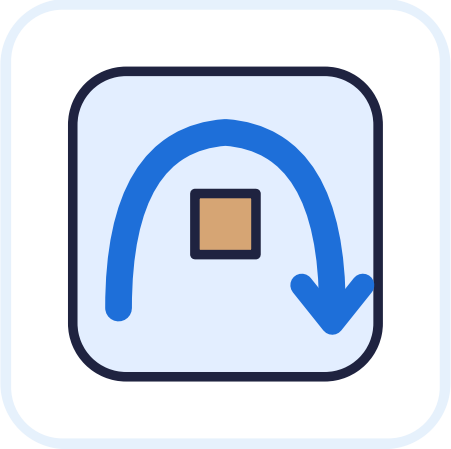
The blocked-path card for item ①; walk straight and go round for item ②.



problem card



walk straight



go round

Station 1 cards: item ④ (MVL)

Mix them up; the child orders them; then swap two.



leave home



buy bread



go home

Teacher clipboard checklist (with Ayo icons)

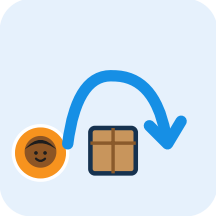
Two per page. Write E, D, S or X in each box; tick MVL on the record sheet.

✂

Name: _____ Team: _____



① problem + steps ☐



② another way ☐



③ change build ☐



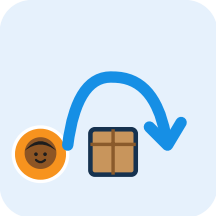
④ order + fix ☐

✂

Name: _____ Team: _____



① problem + steps ☐



② another way ☐



③ change build ☐



④ order + fix ☐

Me as a thinker

Station 3: draw yourself as a thinker, solving a problem. Name: _____

RHINOX SCIENTIFICA · THINK • MOVE • CODE!

Certificate of Achievement



This is to celebrate that

_____

has earned the **Step Thinker · Term 3** badge.
I can say the problem and its small steps, try another way, change my build after a test, and put 3 steps in order and fix a wrong card.

_____ _____

Teacher Date

Nursery 1 · Term 3 · Problem Solving

RHINOX SCIENTIFICA · THINK • MOVE • CODE!

Certificate of Achievement



This is to celebrate that

_____

has earned the **Step Thinker · Nursery 1 Year** badge.
I can put 3 steps in order and fix a simple mistake.

_____ _____

Teacher Date

Nursery 1 · Year award · Can sequence 3 steps and correct a simple error

Step Thinker badges: Term 3 and Year

Cut out and pin or stick on. Full-size artwork is in the badge PNG/SVG files.



Step Thinker · Term 3



Step Thinker · Year



Step Thinker · Term 3



Step Thinker · Year

“My year with Ayo” take-home cards

Two per page. Children draw one picture for each term, then take the card home.

My year with Ayo

Name: _____

Term 1: steps	Term 2: patterns	Term 3: problems

Ask me: “What did you learn in each term?” · “How do you fix a mistake?” · “What will Ayo learn next?”

My year with Ayo

Name: _____

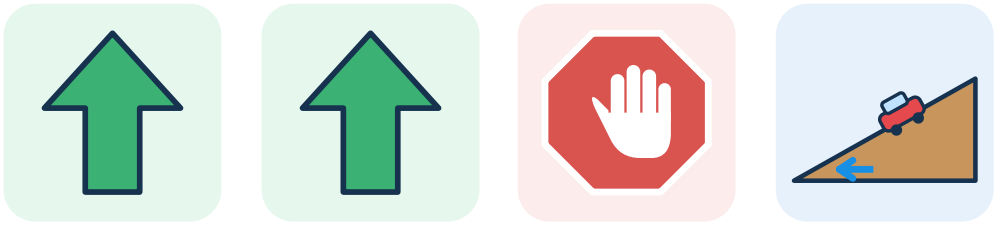
Term 1: steps	Term 2: patterns	Term 3: problems

Ask me: “What did you learn in each term?” · “How do you fix a mistake?” · “What will Ayo learn next?”

Showcase station signs

Children run these stations for families.

1 Ayo’s Ramp and Route



Watch me guide Ayo to our ramp!

Run by our Step Thinkers

2 Fix Silly Ayo



Swap two of my cards. I will fix them!

Families: try it!

Showcase station signs

Children run these stations for families.

3 Our year wall



See our photos and drawings from Terms 1, 2 and 3.

Showcase wall

Step Star stickers · Nursery 1 · Term 3

Optional. Give a star when a child can do it on their own. Print on round 2-inch (50 mm) sticker paper, or cut out.

