10 · Project sheet · Toy Rescue

Robot / Maker Lab practical · Nursery 1 · Term 1 · Week 3

1. At a glance

Time	40 minutes (fits the lesson; 10–15 min if used on its own)
Group size	Groups of 4–6: one commander, one friend-robot, the rest judge
Learning goal	I can give a friend-robot clear commands.
Coding idea	A robot only does what it is told. Clear commands (how many steps, what to do) get the robot to the toy.
Week link	https://rhinoxscientifica.com/q/n1-t1-w3

2. Materials needed

Item	Per	Low-cost swap
Command cards: walk, stop, clap, pick up	pair	Use hand signs instead
Soft toy or soft ball to rescue	group	A shoe, a book or a paper ball
Machine pictures: washing machine, lift, gate	class	Point to real ones in school
Paper robot / commander tags (optional)	child	A sticky note that says ROBOT
Step Star stickers	child	Washable marker star on the hand

3. Safety and care

- Soft toys only; nothing hard or small (choking rule).
- Walk, never run. On “stop”, the robot freezes at once.
- Keep the path clear of chairs and bags.
- Machine buttons (lift, gate, washing machine) only with a grown-up.

4. Before the lesson

1. Print and cut the command cards and machine pictures (Printables pages 1–3).
2. Choose a clear space and a place for each toy, 3–5 steps from the start.
3. Optional: cut out robot and commander tags (Printables page 4).
4. Read the lesson spec the evening before and lay out the cards.

5. Step-by-step guide

Step	Teacher says	Children do
1	“Oh no, Teddy is lost! Our robot will rescue him, but robots only do what they are told.”	Look at the toy
2	“If I just say ‘Go!’, where will the robot go?” (let the robot wander)	Laugh and say “Not clear!”
3	“Commander, give 2 clear commands: how many steps, then what to do.”	Commander: “Walk 3 steps. Pick up Teddy.”

Step	Teacher says	Children do
4	“Robot, do only what you hear.”	Robot walks 3 steps and picks up the toy
5	“Judges, was each command clear?”	Thumbs up or thumbs down for each command
6	“Swap! New commander, new robot.”	Repeat until all have had a turn

6. Explore it

Question	Does a robot need clear commands to reach the toy?
Predict	“If I only say ‘Go!’, will the robot reach Teddy?” Thumbs up or down.
Try	First say only “Go!”. Then give 2 clear commands: “Walk 3 steps. Pick up Teddy.”
Observe	“What happened with ‘Go!’? What happened with the clear commands?”
Explain	Robots and machines only do what they are told. Clear commands get the job done.

7. Talk about it

1a. What commands did you give?

1b. Did the robot reach the toy?

1c. Which command was the clearest?

2a. What machine at home does what people tell it?

2b. Who tells it what to do?

2c. Why do we press its buttons only with a grown-up?

8. Support and stretch

Support	One command at a time. The teacher whispers the command; the child says it aloud or holds up the card.
Stretch (optional)	Give 3 commands in a row: “Walk 3 steps. Stop. Pick up Teddy.” Never assessed.

9. How we check

Observation only, not marked.

Look for	Secure	With prompts	Not yet
Gives 2 clear commands the robot can follow	☐	☐	☐
As the robot, does only what is said	☐	☐	☐
Names a machine at home that does what people tell it	☐	☐	☐

10. Take-home and parent note

> **Dear parent or carer**
> Today we played **Toy Rescue**. Your child gave a friend-robot 2 clear commands to reach a toy.
> At home: hide a soft toy and let your child guide you to it: “walk 3 steps… stop… pick it up!”

11. Show and share

- Each group shows one rescue; the class says the commands back together.
- The child who is Ayo can wear a robot tag for the show.
- Every child who gave 2 clear commands gets a **Step Star sticker**.



The Step Star is a weekly sticker, not a badge. The term badge “Step Thinker · Term 1” is awarded in Week 13.