

The Very Literal Robot

Your child gives instructions for making a snack, and you follow them exactly as spoken, no more and no less. A funny, messy first lesson in why computers need every step spelled out.

AGE BAND	DURATION	GROUP SIZE	CONCEPT
Ages 5–10	15 minutes	One adult, one or more children	Algorithms

What your child practises

Your child can explain that a machine follows instructions exactly as given, and that a good set of instructions leaves nothing for the machine to guess.

What you need

- Two slices of bread, something to spread, a blunt knife, and a plate
- No spare food? Use building blocks or cups instead: "build a tower of three"
- Paper and a pencil, if your child wants to write the steps down

Why it works

Adults fill gaps without noticing. Told "put jam on the bread," we open the jar, pick up the knife, and spread. A machine does none of that unless it is told. When you play a robot that does only what it hears, your child discovers the gap for themselves, and they discover it by laughing at you holding a closed jar against a slice of bread.

How to play

1. Explain the game: you are a robot that makes snacks, and you only do exactly what you are told.
2. Ask your child to tell you, one step at a time, how to make the snack.
3. Follow each instruction literally. "Put the jam on the bread" might mean placing the whole closed jar on top of the slice.
4. When something goes wrong, stop and wait. Let your child fix the instruction and try again.
5. Once the snack is made, read the final list of steps back together. Count how many steps it took.

Make it easier, make it harder

- **Easier:** use blocks or cups, with three or four steps in total.
- **Harder:** your child writes the steps down first, then hands the paper over and is not allowed to speak while the robot works.

Talk about it

- Which step was the hardest one to explain? Why?
- What did you know that the robot didn't?
- If a real machine was making food for a lot of people, what would happen if one step was missing?

If your child asks

"Are computers really that silly?" Computers are very fast and very exact, but they do not guess what you meant. People called programmers write the steps for them. Newer AI systems can follow looser instructions, because they have learned from lots of examples what people usually mean. They still get it wrong sometimes, in ways that can be surprising.