02 · Lesson spec

Let's Build It! · 40 minutes · fully unplugged

Goal (I can)	**I can build a bridge or ramp and test it.**
Teacher aim	Children build a bridge or ramp from big blocks, test it with a toy car, and try another way if it falls.
Focus	Build a tower, bridge or ramp; push, pull and roll
Key words	bridge · ramp · tower · strong · test · push · pull · roll
Materials	Blue paper 'river'. Ramp boards or a plank. Big blocks, boxes, card. A large toy car or plastic bottle (wheels fixed). A ball. A box on a string. Build card (blocks → plank → test). Activity Books, crayons.
Before class	Read this plan. Check the toy car is bigger than a toilet-roll opening and its wheels are fixed. Adults do any cutting before class. Big pieces only; builds stay on the floor or table.



1. Think (6 min)

- Lay down the blue paper river. Say: "Ayo's toy car must cross the river."
- **Ask:** "Can we build a bridge or a ramp? What makes a tower fall?"
- Show the 3 plan cards: blocks → plank → test.
- **Extra (not in the Teacher Guide) – hand signs:** build = fists stacking · bridge = arms make an arch · ramp = slanted arm · strong = show muscles · test = thumbs up/down wiggle · push = both palms forward · pull = hands pull a rope · roll = roll hands forward.

2. Move (10 min)

- Push, pull, roll in 3 corners, groups rotating: push the big toy car; pull the box on a string; roll a ball or bottle down a low ramp, then a higher one. Ask: "Which went further?" Cheer when it reaches the end.

3. Build (16 min)

- Groups of 4–6 follow the plan cards: blocks → plank → test.
- They build a tower, bridge or ramp and test it with the toy car. If it falls, try another way and test again. No climbing on builds.

4. Book & close (8 min)

- **Activity Book:** children circle the strong bridge and match push and pull, talk through test, change one thing, test again, then draw and name their bridge. Close: one group shows the car crossing. Everyone: "We built it and tested it!"

Activity Book page

- Circle the strong bridge; match Ada and Musa to push and pull; test, change one thing, test again; draw and name your bridge. Not marked.

How we check

- **Look for:** Does the child help build a bridge or ramp, test it with the toy car, and use push, pull or roll?

Common mistake

- Children build tall and thin, so it falls. Ask: "How can we make it strong?" Show a wider base. Remind them: if it falls, try another way.

Support and stretch

- **Extra help:** Build the first 2 blocks together. Let the child place the plank and push the car. Praise testing: "Let's see if it works!"
- **Stretch (optional, not in badges):** Make the bridge hold two cars, or build a tower as tall as your knee that stands.

No power? No problem

- Fully unplugged: needs no power, device or kit. No ramp board? Use a big book or a tray resting on two blocks.

Before and next

- Before: Week 2 Break It Small (plan in steps); Week 4 Try Another Way; Term 2 W4 pattern track. Next: Week 8 Solve a Big Challenge; Week 11 ramp-or-tower build; Week 12 checklist.

> **Safety**
> Adults do any cutting; big pieces only. Wheels checked. No climbing on builds. Short string, never round a neck. Towers no taller than a knee.

Hand signs (where shown) and the Safety box are Lesson Plan extras added by Rhinox. Everything else follows the Teacher Guide and the Activity Book.