

Design Brief

A local problem: define and design

engineering

What you need: Investigation Journal Design Brief page • problem cards (seed-tray cover, ball barrier, book stand, draught-stopper) • clipboard • 30 cm ruler • scrap paper for rough notes

Words to use

User need • Success criteria • Design Brief

The problem

Solve one teacher-curated local school problem with a small built structure or device the group can make from the shared junk-modelling kit

Who is it for?

The real school user named on the group's problem card (caretaker, yard supervisor, readers, the class)

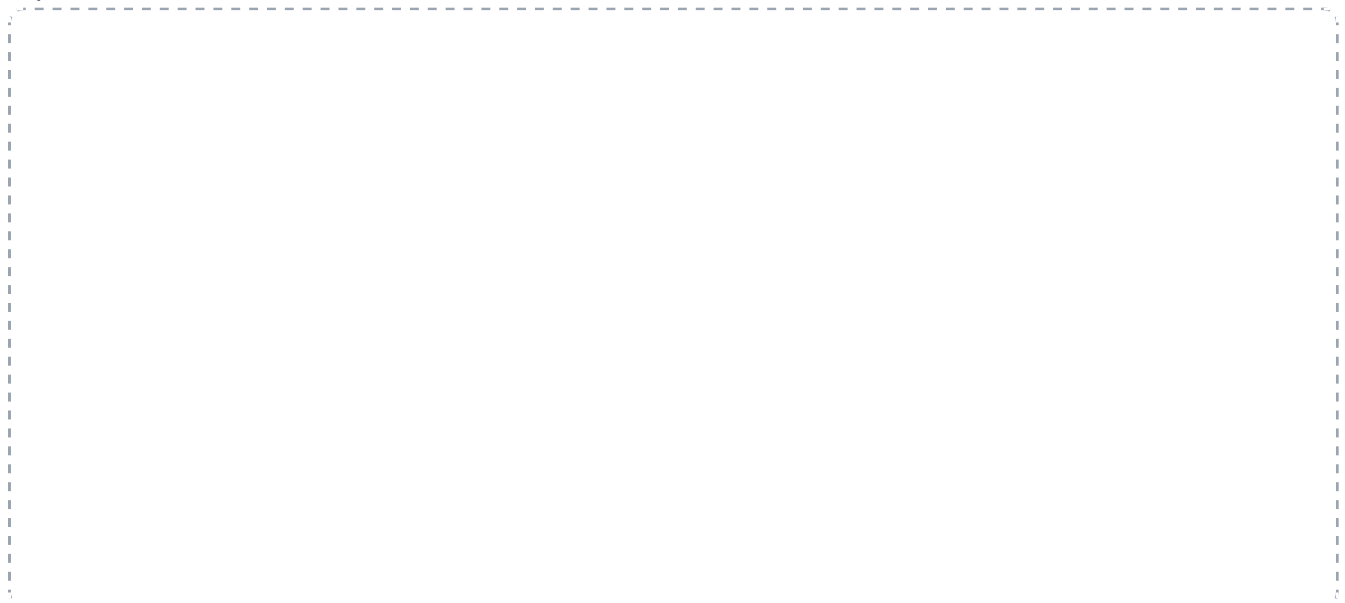
Their one real need

What it must do, and must NOT do

Choose only from the four curated problems • Solution must be buildable next time from the shared junk-modelling kit (cardboard, tape, string, lolly sticks, fabric scraps) • Sketch must include labels, expected materials and at least one size in centimetres (estimated sizes with a unit label are fine) • Three success criteria must be things the group can test later

Risks and limits we noticed

My first ideas – draw and label them





Lesson 34

Check your drawing shows

- Write the problem and the user in plain words • List three success criteria you can test
- Sketch one solution and label parts, materials from the junk kit, and sizes in centimetres

Our measurements, in centimetres

You may use

Investigation Journal Design Brief page • pencils and rulers • clipboards • problem cards for reference

What we will use, and how many

Our three success criteria

We will know it works when...

- Design Brief names problem, user and three testable success criteria • Sketch is labelled clearly enough that another group, or the same group next week, could start building from it • Idea fits the kit and the school setting safely

