

Design Brief

Design and build the solution

engineering

What you need: class tablet or hardback book of similar size (stand-in load) · pre-cut same-height wide and narrow base templates (about 5 cm upright face; wide footprint ~15 cm × 10 cm, narrow ~6 cm × 10 cm) · flexible build kit (cardboard sheets, clean recycled boxes or tubs, lolly sticks, string, masking tape; optional glue sticks for paper only; optional pre-cut upright strips and small shelf pieces) · scissors · Investigation Journal pages

Words to use

User need · Option test · Prototype model

The problem

Design a stand that holds a class tablet (or a book of the same size) upright and steady on a desk so pupils can film or follow an investigation without it tipping.

Who is it for?

Pupils in our class who need a steady device or book stand on a desk

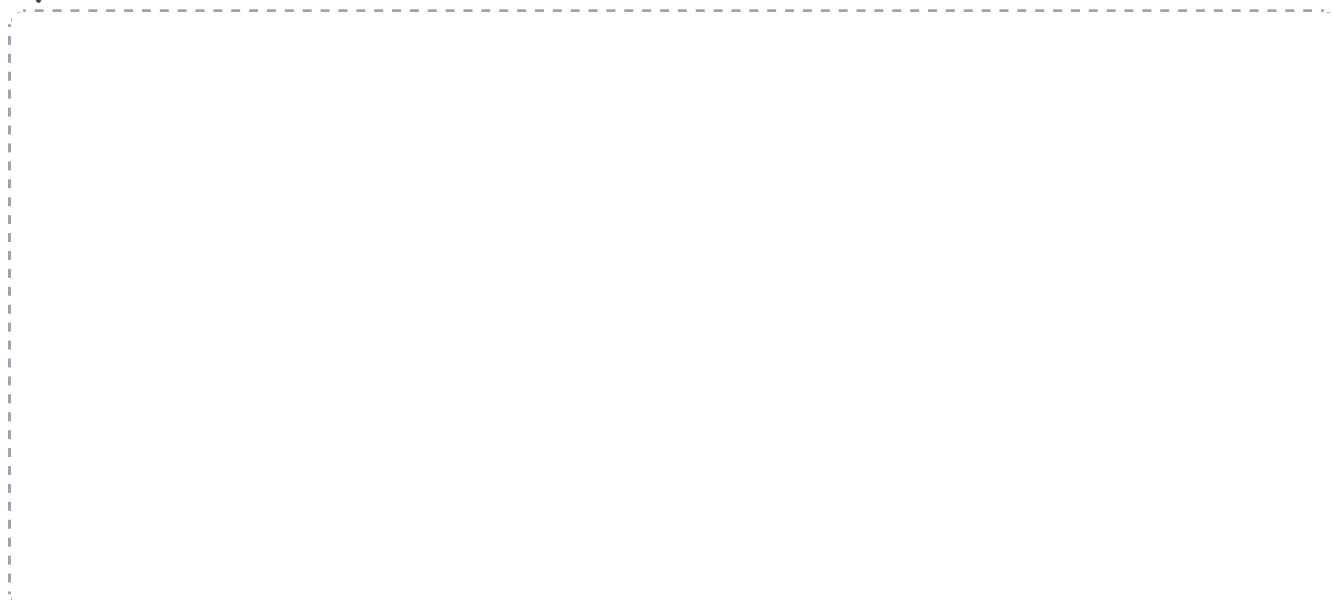
Their one real need

What it must do, and must NOT do

Use only the flexible build kit provided · Must fit on a standard desk · Must use the base shape that won the option test · Plan only in this step; build comes next · Prefer tape for joins; glue sticks only for light paper-to-paper

Risks and limits we noticed

My first ideas – draw and label them





Lesson 35

Check your drawing shows

Sketch one labelled side view of the stand • Label the base, the support, and where the device sits • Tick the materials you will use from the kit list on the board • Tick the class success criteria already on the board • Show the winning base shape from the option test



What I will use

cardboard and card • lolly sticks • masking tape (default join) • glue sticks (optional, paper-to-paper only) • string • clean recycled boxes or tubs • scissors



We will know it works when...

Holds the tablet or book upright • Stays steady when the desk is lightly bumped • Device or book can go in and out easily • Built from the kit materials only

