

Design Brief

A helper for a friend: plan and make

engineering

What you need: cardboard boxes and card offcuts (clean cereal boxes, small delivery boxes; shared table tray for the pairs at that table) · paper tubes (kitchen or wrapping-paper tubes cut to short lengths; shared table tray for the pairs at that table) · paper and card scraps (shared table tray for the pairs at that table) · lolly sticks (shared table tray for the pairs at that table) · masking tape (shared table tray for the pairs at that table) · glue sticks (shared table tray for the pairs at that table) · round-tip scissors · name labels or sticky notes for finished models · project tray or shelf space to store models until the next part of this project

Words to use

Problem · Plan · Model

The problem

A friend has a small classroom problem. Design a simple helper that makes that problem easier.

Who is it for?

a chosen friend in the class

Their one real need

What it must do, and must NOT do

Use only the junk-modelling materials on the table · Small enough to sit on a desk · Must be something one pair can make in this lesson

Risks and limits we noticed

My first ideas – draw and label them



Lesson 35

Check your drawing shows

Who is it for? • What is the small problem? • Sketch your helper and point to the main parts • Which materials will you use?



What I will use

cardboard boxes and offcuts • paper tubes • paper and card scraps • lolly sticks • masking tape • glue sticks • safe scissors



We will know it works when...

Names a friend and one small problem • Drawing shows the idea with main parts • Names at least two materials to use

