

Prototype Evaluation

Test, improve and share

engineering

What you need: group prototypes from earlier in this project · Design Brief pages from earlier in this project · small test weights (books or bean tins, about 200–400 g) · metre stick or 30 cm ruler · stopwatch · masking tape · drinking straws · card offcuts (include pre-cut strips and triangles) · round-tip scissors · sticky notes · Investigation Journal pages

Words to use

Success criteria · Improvement · Evidence

The problem

The first test showed at least one success criterion not fully met. Improve the prototype so it better serves the user.

Sort these words into Change, Measure and Keep the same

none on the first test — we test the prototype as built · whether each success criterion is met, plus any count, distance or time the group agreed · the prototype as built earlier in this project · the success criteria on the Design Brief · how we run each check (same weight, same starting place, same timing method)

Change — the ONE thing we change

Measure — the ONE thing we measure

Keep the same — to make it fair

What we promised it would do

The change is linked to a failed or weak first-test result · The prototype can be re-tested against the same criteria · The group can explain the design choice in one sentence

How it did against each one

What we promised	What happened

The one thing we changed



Lesson 36

How it worked before, and after

