

Design Brief

Test, improve and present

engineering

What you need: group prototypes built earlier in this project · completed Design Brief pages from earlier in this project · Investigation Journal testing page · Investigation Journal results page · small weights (washers, coins or 100 g masses) · jug of water and shallow tray · teaspoon for counted water pours · classroom books for stand or holder load tests · soft ball · stopwatch or class timer · metre stick or 30 cm ruler · masking tape · scrap card offcuts · string · tissues or paper towels (for dry-check under shelters) · cloths for spills

Words to use

Success criteria · Evidence · One improvement · Design process

The problem

Use first-test evidence to make one improvement so the prototype better meets the success criteria

Sort these words into Change, Measure and Keep the same

the one part the first test showed was weakest · whether that criterion is met now, with a count, time or clear observation · the rest of the prototype, exactly as it was built · the success criteria from the Design Brief · the test method (same load, pour, roll or timing as the first test)

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 – copy your three success criteria from your Design Brief

How it did against each one

Success criterion	How we tested it	The result

What another group noticed



Lesson 36

The one thing we changed



How it worked before, and after



How close we are to meeting the brief

