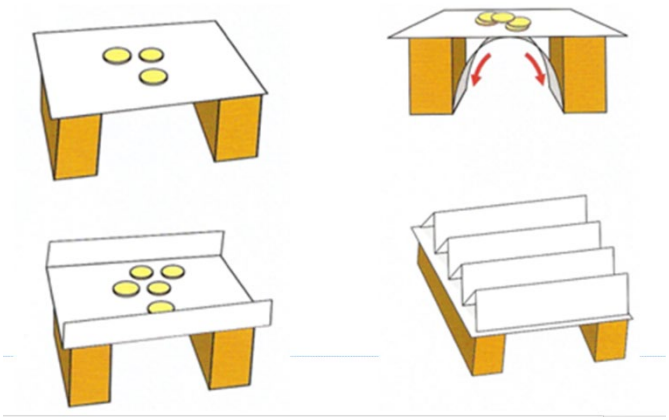
Make your bridge strong (Post-Primary)

Read it -- Try it safely -- Explore it further

The strength of materials vary, depending on how they are used.
How strong a bridge can you make with a sheet of paper.
Test different designs to see which can hold the heaviest load.



You will need:
Sheets of A4 paper, several identical coins.

What to do:

* Using a set of identical blocks as supports, lay a single sheet of paper across it (a bridge). See how many coins you can place on this bridge before the bridge collapses.

* Try with one piece of paper and fold up the sides, i.e. a walled bridge.

* Use the same piece of paper but this time fold it like a fan, making a corrugated bridge. How many coins/counters can it support now?
For fair testing, use the same width between the supports, and the same type of paper each time

* Next time, make an arch to support your first bridge.
Simply bend another sheet of paper and place it under the first sheet, two of its edges touching the table.

Extension activity:

Repeat with sheets of card instead of paper.