



DINO'S DYNAMOS Experiment

Building Bridges...

What you need:

- Two Heavy Books of equal size
- Piece of Card (A4)
- Plastic lid from jar
- Lots of paper clips



Step 1. Place two books on a table with a gap in-between about the size of your hand.

Step 2. Balance the card on top of the books so it covers the gap making a bridge between the two books.

Step 3. Place the plastic lid on top of the paper over the gap. Add paperclips to the lid. How many does it take to collapse your bridge?

Step 4. Remove the lid and this time make a different bridge by wedging the paper in between the two books to create an arch.

Step 5. Place the plastic lid on top of the paper over the gap on your new bridge.

Step 6. Add paperclips to the lid. How many does it take this time to collapse the bridge?



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Explain the experiment!

Bridge number 1 is flat and has nothing to support it sides so it collapses easily

When the card is arched like on the second bridge, the weight is passed along the card and into the heavy books at the sides. Because the weight is shared between card and books, the bride can support more weight.

FACT! The Forth Rail Bridge was built nearly 120 years ago!

FACT! The largest bridge in the world is the Akashi-Kaikyō Bridge, also known as the Pearl Bridge in Japan. It measures 1,991meters in length, that's over 1 mile long!

