

CHALLENGE

01

SPAGHETTI BRIDGES

THE BRIEF

CONSTRUCT A BRIDGE OUT OF SPAGHETTI, STRONG ENOUGH TO SUPPORT A 250G BAG OF SUGAR.

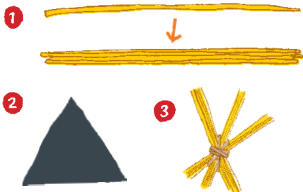
MATERIALS

Spaghetti, small elastic bands or bag ties, sticky tape.



THE METHOD

- 1 Think about bracing strands together for strength.
- 2 Some shapes are better at absorbing loads – triangles are particularly strong.
- 3 Elastic bands make for good junctions.



HOW DOES IT WORK?

Bridges manage two important forces: compression and tension – pushing and pulling.

Too much of either and they buckle or snap.

BE PATIENT

Through trial and error, you'll become proficient with spaghetti.

DESIGN ICONS



Suspension bridge



beam bridge



truss bridge



arch bridge



cantilever bridge



cable stayed bridge