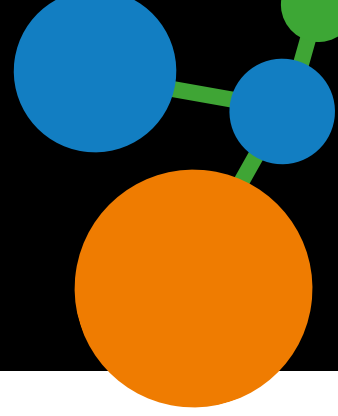


HOLD THE LOAD CHALLENGE



Prepare your students for the Science Alive! STEM DAY OUT: Da Vinci Bridge Build

At school activity

Create a self-supporting bridge using Leonardo Da Vinci's design principles, without using any nails, screws, or glue. Construct the bridge by intricately weaving the sticks together so that the tension between them not only holds the structure together but also raises it above the ground.

The bridge can withstand downward forces well, but lateral forces from the sides may make it unstable and prone to toppling over. Moving the bridge even slightly while it's standing could cause it to collapse, so handle it with care.

Objectives:

- Use simple construction to create a self supporting bridge
- Understand how forces can act on a structure

What you will need:

- Craft sticks
- Patience

Rules:

- In pairs where possible
- Use 16 craft sticks minimum
- No adhesive or fasteners to be used

Test Bridge:

- Carefully test bridges strength with weights provided until it fails

Image Examples

- Refer to the link below for images and further instructions:
<https://www.instructables.com/Da-Vinci-Popsicle-Stick-Bridge/>