

#HOMESCHOOLING



Build a Bridge

Skills that are being tested

- Mathematics
- Physics
- Art and Design

Careers in Construction it relates to

- Architect
- Surveyor
- Design Management
- Sustainability
- Engineer

Overview

Design and build a bridge with a span of at least 30cms. There can be no middle point in between the two stands. This a great way for your child to explore their creativity, but equally understand **how crucial structure is** for a building!

Age Range: 8 to 13 years old

Equipment

- Pad/paper and pen for calculations and design.
- Find anything in your home to build a bridge with! This could be loo roll, spaghetti, lollipop sticks and straws.
- One roll of masking tape or sticky tape.
- Weights to measure the strength of the bridge (you could even use tins or packets of pasta you can find in your cupboard).

How to run the activity

- Explain what the challenge is – to design and build a bridge spanning at least 30cms using the materials you see if front of you.
- Explain that there should be no middle stand and that the bridge should only be able to stand up using two structures at the ends.
- Set a time constraint – suggested times are 10 minutes for design and 20 minutes for build.
- Allow your child to be creative, but remind them of the rules to complete the bridge.
- Ensure to remind them of the time frames as they are building.

OPEN
DOORS
Get into Construction

**Tweet us your bridges
at @OpenDoorsWeek and
using the hashtag
#OpenDoorsgoesDigital**

#HOMESCHOOLING

On completion of the activity

- Measure the length of the bridge.
- Test the bridge by placing weights in the middle.

OPEN
DOORS
Get into Construction