## 3 Bridges

#### EQUIPMENT

- A4 paper 12 sheets per team (2 for initial exploration, 5 for their first trial, 5 for the final bridge). Have a few pieces in reserve. Scrap paper is fine.
- Pritt stick
- 10 and 100 gram masses, coins, blocks or other equipment to act as 'weights' bridges can support a surprisingly large mass.
- Play blocks or similar to create the 20 cm gap for the bridge or gap between chair and tables.
- Scissors.
- Pictures of bridges (optional).
- Blocks etc to support bridges.
- Rulers

### RISKS

Avoid weights falling from a height. Something to catch falling weights.

### SUPPORT

Through this activity you will support your group to:

Build different models of bridges.

Test their different models to see which can hold the most weight and why.

Record and share their results.



# BRIDGES



NAME: .....

How can sheets of paper be made to support heavy weights?

## Bridge design 1

Diagram (span at least 20cm)

What weight did this design support?
Why did this design fail?
Improvement for next design.

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### Bridge design 2

Diagram (span at least 20cm) This design should include your improvements from your first design.

What weight did this design support?
Why did this design fail?
Improvement for final design.

## Final bridge design

Diagram (span at least 20cm) This design should include your improvements from your second design.

What weight did your final design support?

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