

## Activity: Paper Bridge

The activity aims to demonstrate the engineering process to design and construct a bridge using newspaper. When it comes to constructing a bridge, the shape of the material is very important. Remember, the strongest shape was the triangle. The students can come up with many different shapes for their bridges and should try to put as much weight on it in the end.

**Age suitability:** The activity can be adapted to suit primary, as well as secondary level.

### Materials:

- Newspaper
- Sticky tape
- Something to act as sides of a 'river', e.g. a shoebox, two piles of books, two tables
- Weights (e.g. pencil cases or water bottles to load the bridge)
- For facilitator – models of bridges

### Method:

1. Show the students photos of real bridges and an example bridge made from newspaper.
2. Divide the students into groups.
3. Ask each group (with the teacher's assistance) to decide what the sides of a 'river', e.g. a shoebox, two piles of books, two tables.
4. Groups should work together to discuss and design their bridge, thinking about shape, strength, and making sure it is long enough to cross the 'river'.
5. Then the groups can construct their bridge using the newspaper and sticky tape, using the engineering process.
6. When constructed, students can test the strength of their bridge by adding weights.
7. See which group constructed the strongest bridge and ask them what shape they used to build it.

