

Spaghetti Towers

Challenge: Build the tallest structure out of spaghetti.

Objective: Consider how forces will act on your structure and how you can make use of strong shapes to strengthen your structure.

Resources needed: Spaghetti, blue tack, patience.
(alternatively straws, pencils, tape, plasticine)



Have a look at these two famous structures, can you name them?

Look at the different shapes that are used in the structure to enable them to achieve a great height. Each section of the structure has been carefully engineered to distribute weight.

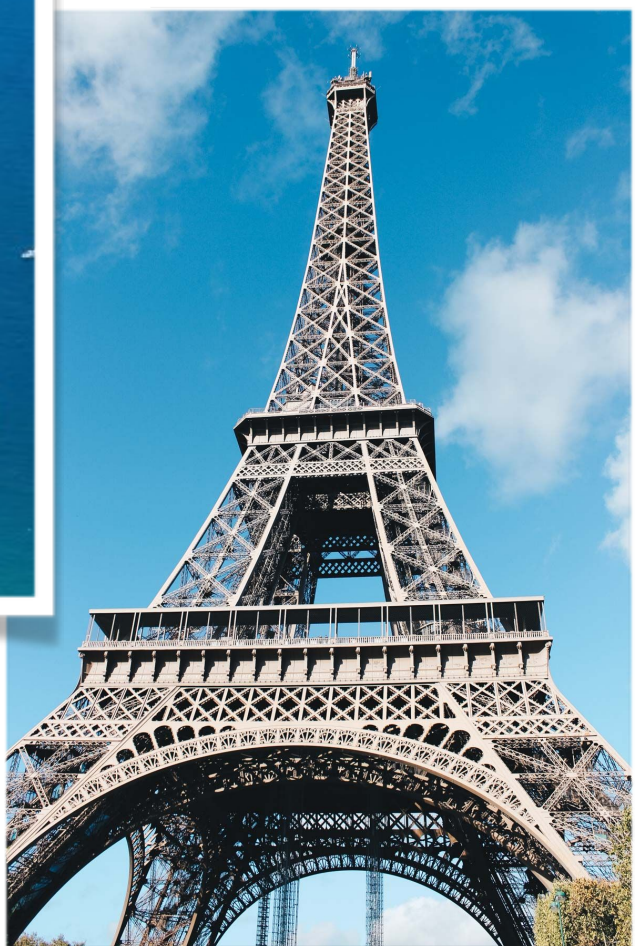
What can you learn from looking at these structures and how will you use this information when building?

Key Words

Structure , forces, weight distribution, compression, tension, design, engineering

Rules

- 1) You can use as much spaghetti as you are allowed (please ask before raiding the cupboards!)
- 2) You can use any alternative to blue tack but no glue guns allowed!
- 3) Your structure must be freestanding (not attached to the table)
- 4) Send photographic evidence to your teacher to receive points.



Extension task/extra challenge: research different tall structures and see if you can use these as inspiration to create a more imaginative structure.