

Design and Technology Structure - Pavilions



What I should already know:

Enquiry Questions

- Can we create a range of different shaped frame structures?
- Can I design a structure?
- Can I build a frame structure?
- Can I add cladding to a frame structure?

Key Vocabulary

Aesthetic – How an object or product looks.

Cladding – A material put on top of another material or on a structure as protection or to improve appearance.

Design criteria – A set of rules to help designers focus their ideas and test the success of them.

Evaluation – When you look at the good and bad points about something, then think how you could improve it.

Frame structure – A way of building something so that the inside supports are built first and the outside covering is added afterwards as cladding.

Function – The purpose of an object (for example, a chair needs to hold a person when sitting down); or how a product works (for example, a torch needs to provide light in a dark space).

Innovative – New and inventive

Inspiration – To gain ideas from different sources such as the internet, magazines and books.

Natural – Of or produced by nature; not made by humans

Pavilion – A decorative building or structure for leisure activities.

Reinforce – To make a structure or material stronger, especially by adding another material or element to it.

Stable – Object does not easily topple over.

Structure – Something that has been made and put together and can usually stand on its own (e.g. a building, a bridge, a chair).

Target audience – A person or particular group of people at whom a product is aimed.

Target customer – A person or particular group of people who you expect to buy the product.

Texture – The way that something feels when you touch it (e.g. soft, rough, smooth).

Theme – An idea or specific design that your product or structure is based on (e.g. space-themed).

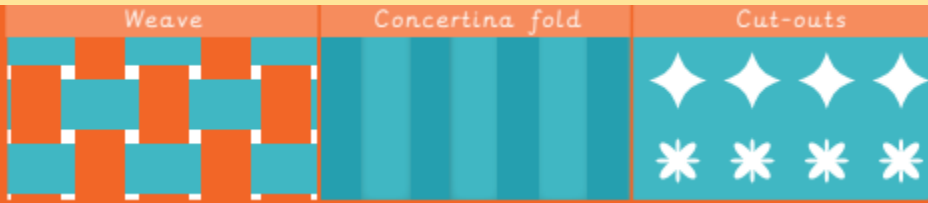
Design and Technology Skills

Pupils will:

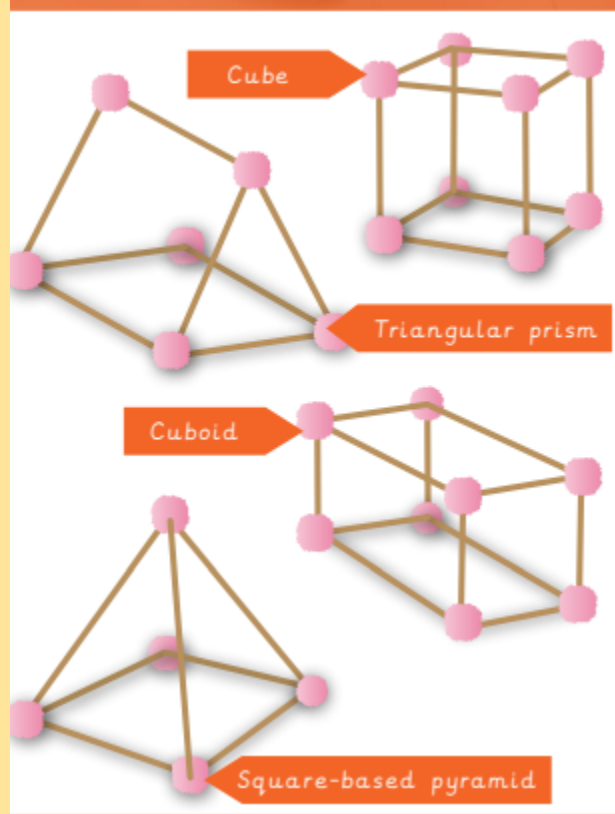
- Design purposeful, functional, appealing products for themselves and other users based on design criteria.
- Generate, develop, model and communicate their ideas through talking, drawing, templates and mock-ups.
- Select from and use a range of tools and equipment to perform practical tasks, e.g. cutting, shaping, joining and finishing.
- Select from and use a wide range of materials and components according to their characteristics.
- Evaluate their ideas and products against design criteria.
- Build structures, exploring how they can be made stronger, stiffer and more stable.

Useful images

You can create all sorts of **textures** for your **cladding** designs using different materials and techniques.



There are variety of ways to assemble a **frame structure**.



Links to other curriculum areas: Geography - Designing a pavilion to withstand an earthquake.

