



DT – Year 2 Structures- Paper Mache Volcano

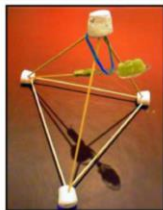
(Previous knowledge – Year 2)

Vocabulary

Tier 1	Tier 2	Tier 3
Plan	Design	Corrugation
Make	Evaluate	Stability
Glue	Tabs	Layers
Model	Structure	Triangulation
Product	Paper mache	
Paint	Inflate	

Useful Resources

<https://youtu.be/sPhuwXB1ZLM?si=2eg0C8M3kXC rDPGi>



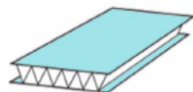
Triangulation involves the use of triangular shapes to give stability to a structure. This can be seen on bridges or towers, such as the Eiffel Tower in France.



Triangulation can relate to hinged or pinned structures, these types of structure usually offer no resistance to bending movements when a force is applied. **Triangulation** allows the force to be spread.



Corrugation is a method of strengthening paper or card material by zig zagging a piece of paper/card and gluing it between 2 layers of paper/card.

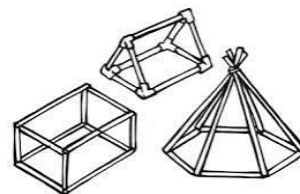


Tabs are used to join together two pieces of cardboard. You can stick these together using a glue gun, cello tape or PVA glue.

Structure: Paper Mâche Volcano

What is a structure?

Frame structures are rigid support structures that use beams, columns and slabs to hold large forces of gravity and weight. Frame structures give shape and are useful for support & weight bearing. Frame structures have joints which are formed according to the design requirements and materials being used.



What is paper mâché?

Strips of paper can be mixed with glue and laid on top of a structure. When they dry, the structure will be stronger and you can paint it to create a professional finish.

