Year D Design and Technology

Year 4 – Bridges (Frame Structures)

Design Brief -
To make an aquaduct bridge which will transport water.



By the end of this project pupils will know-

-Understand how to strengthen, stiffen and reinforce 3-D frameworks.

-Know and use technical vocabulary relevant to bridges (see below)

How will I do this?

- **Draw / sketch existing products in order to analyse and understand how bridges are made.**
- **Record their plan for their bridge by drawing using annotated sketches.**
- **Use prototypes with different structures to develop and share ideas.**
- **Measure and mark shapes accurately to 1cm.**
- **Consider and explain how the finished product could be improved.**
- **Identify the strengths and weaknesses of their design ideas in relation to their bridge.**

KEY VOCABULARY

frame structure,
stiffen, strong, strengthen, reinforce, triangulation, stable, stability, shape, join, temporary, permanent, design brief, design specification, prototype, annotated sketch, purpose, user, innovation, research, functional