Year D Design and Technology

Year 6 – 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?

- **Plan the project of making a bridge**
- **Devise a step by step plan which can be read / followed by someone else and include a detailed list of components and tools**
- **Use exploded diagrams and cross-sectional diagrams to communicate ideas.**
- **Make prototypes to test measurements and how to strengthen materials.**
- **Measure, draw and cut shapes from paper accurately to 1mm.**
- **Refine their product – review and rework / improve.**
- **Identify the strengths and weaknesses of their design ideas and report using correct technical vocabulary.**

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