St Leo's and Southmead Catholic Nursery and Primary School

Year Five

Design Technology Knowledge Organiser

Spring Term

Amazing Activity
Visit the catalyst museum to participate in a workshop (Bridges to Schools)

Building Bridges

Key Vocabulary

Design - a drawing of a product to be made

Purpose - what/how something is used for

Sketches - a rough drawing of an idea

Diagrams - a simplified drawing which has been annotated

Structure - a building or other object constructed from several parts

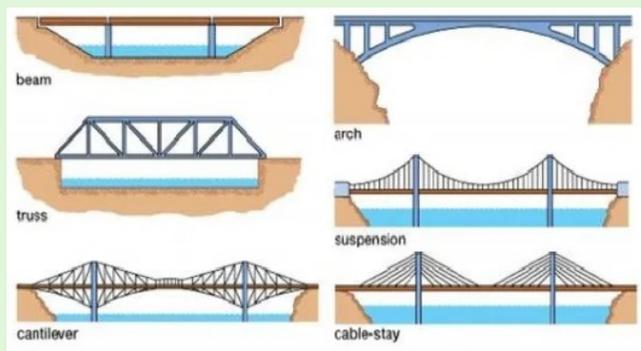**Materials** - paper, metal, plastic etc

Evaluate - to say what is good about something and what can be improved

Bridge - a structure carrying a road, path, railway, etc. across a river, road, or other obstacle.

Concertina folding

Types of bridges

Curriculum Links

- **Technology/English:** Research information about the different types of bridges

- **Maths:** Measuring accurately in cm.

Key Concepts

- A bridge is any kind of structure which breaches a gap
- Paper can be made stronger by folding in different ways
- **Triangles** are effective tools for architecture and are used in the design of buildings and other structures as they provide strength and stability. The most sturdy of are equilateral and isosceles; their symmetry aids in distributing weight
- Prototypes are used to allow designers to experiment before deciding on their final product

Skills

- Draw up a specification for their design
- Develop a clear idea of what has to be done, planning how to use materials, equipment and processes, and suggesting alternative methods of making if the first attempts fail
- Use results of investigations, information sources, including ICT when developing design
- Select appropriate materials, tools and techniques
- Measure and mark out accurately
- Use skills in using different tools and equipment safely and accurately
- Cut and join with accuracy to ensure a good quality finish to the product
- Evaluate the product against the original specification
- Personally evaluate the product and seek the thoughts of others

Nurture, Inspire, Succeed