



DT Knowledge Organiser—Year 5/6 (Autumn Term)

Cycle A

Key enquiry Question: *What are truss, beam, suspension and cantilever bridges and how do they work?*

Investigate, design and make a bridge

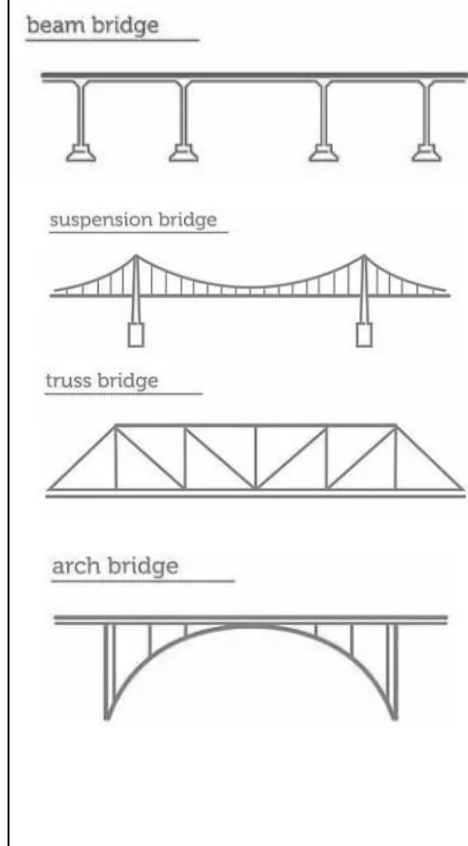
What children must know and remember:

Key Vocabulary:

- Beam
- Arch
- Truss
- Suspension
- Tension
- Reinforce
- Triangulation
- Constraints
- Prototypes
- Manipulate
- Sustainable

Key Knowledge:

- To understand some different ways to reinforce structures
- To understand how triangles can be used to reinforce bridges
- To know that properties are words that describe the form and function of materials
- To understand why material selection is important based on their properties
- To understand the material (functional and aesthetic) properties of wood
- To understand the difference between arch, beam, truss and suspension bridges
- To understand how to carry and use a saw safely





DT Knowledge Organiser—Year 5/6 (Spring Term)

Cycle A

Key enquiry Question: *What electronic toy games are available on the market?*

Investigate, design and make a steady hand game.

What children must know and remember:

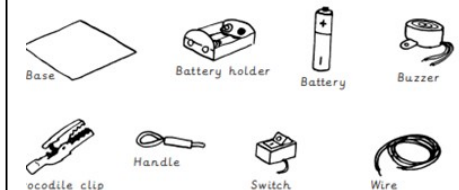
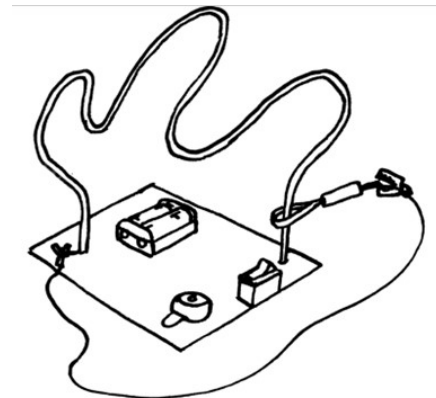
Key Vocabulary:

- Reliability
- Aesthetics
- Series circuits
- Parallel circuits
- LED
- Components
- Assembling
- Motif
- Graphite
- Motor
- Prototypes
- Perspectives

Key Knowledge:

- To know that batteries contain acid, which can be dangerous if they leak
- To know the names of the components in a basic series circuit including a buzzer
- To know that 'form' means the shape and appearance of an object
- To know the difference between 'form' and 'function'
- To understand that 'fit for purpose' means that a product works how it should and is easy to use
- To know that form over purpose means that a product looks good but does not work very well
- To know the importance of 'form follows function' when designing: the product must be designed primarily with the function in mind
- To understand the diagram perspectives 'top view', 'side view' and 'back'

Circuit and components





DT Knowledge Organiser—Year 5/6 (Summer Term)

Cycle A

Key enquiry Question: *How much do cakes cost to make and where does the food come from?*

Investigate, design and make a cake for a tea party.

What children must know and remember:

Key Vocabulary:

- Collaboration
- Cookbook
- Cross contamination
- Flavour
- Method
- Nationality
- Preparation
- Recipe
- Target audience
- Unit of measurement
- Bridge method (see photo)

Key Knowledge:

- To know that 'flavour' is how a food or drink tastes
- To know that many countries have 'national dishes' which are recipes associated with that country
- To know that 'processed food' means food that has been put through multiple changes in a factory
- To understand that it is important to wash fruit and vegetables before eating to remove any dirt and insecticides
- To understand what happens to a certain food before it appears on the supermarket shelf (Farm to Fork)



The five different food groups are:
1. Carbohydrates
2. Fruits and vegetables
3. Protein
4. Dairy
5. Foods high in fat and sugar



You cannot mix raw meat with other ingredients, it is not safe. Remember to also wash your hands after handling raw meat.