

Key vocabulary

Bridges	A bridge is used to allow people to cross from one side of land to another.
Strong	This means it is not easy to break.
Withstand	This is its ability to remain undamaged and unaffected.
Stable	This is where something is fixed in position. It is not easy to move.
Materials	These are the chosen items used.
Evaluate	This is where you look at how well the product did.
Improvements	This is the ability to change and make the product better.
Joining	This is where we put two things together and fix them in position so they do not come apart.

Objectives

- design purposeful, functional and appealing products for themselves and other users based on design criteria
- generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology
- select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]
- select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics
- explore and evaluate a range of existing products
- evaluate their ideas and products against design criteria
- build structures, exploring how they can be made stronger, stiffer and more stable
- explore and use mechanisms [for example levers, sliders, wheels and axles] in their products.

Process

Investigate	We will begin by exploring different materials and investigating the use of each one. Looking at the structure and shape of bridges we will begin to explore a range of resources such as: Spaghetti, newspaper, sticks, straw, bricks and straws. This process will allow us to develop an idea for our design.
Design	We will use our prior knowledge of investigating to inform our design. We highlight the resources needed to ensure that the bridge we create is stable and can withstand weight.
Make	During the making process we will be cutting, gluing, joining and using a variety tools to create our bridge.
Evaluate	This is the final step in the process where we look at the making of the bridge and the final product and discuss how effective it was. We then use this to identify the changes we could make.

Bridges



