

Inquiry Question: How are bridges built?

Key Vocabulary

Design	Make	Evaluate
Structure	Support	Materials
Stiff	Strong	Stable
Freestanding	Bridge	

Key Learning

Know how to make freestanding structures stronger, stiffer and more stable.

Know and use some technical vocabulary relevant to the project.

Skills

<i>Design</i>	<i>Make</i>	<i>Evaluate</i>
Generate ideas based on simple design criteria and their own experiences, explaining what they could make.	Plan by suggesting what to do next.	Explore a range of existing products related to their design criteria.
Develop, model and communicate their ideas through talking, mock-ups and drawings.	Select and use tools, equipment, skills and techniques to perform practical tasks, explaining their choices.	Evaluate their product by discussing how well it works in relation to the purpose, the user and whether it meets the original design criteria.
	Select new and materials, components, reclaimed materials and construction kits to build and create their products. Use simple finishing techniques suitable for the products they are creating.	

In Year 1, you learnt how to;

- Build structures, exploring how they can be made stronger, stiffer and more stable.
- Use words and pictures to describe what you wanted to do.

Overview - Structures

Freestanding structures are structures that can stand up without being



attached to something else.

Freestanding structures need to support their own weight and also the weight of the things/people using them.

So that they can do this, freestanding structures need to be well-designed: strong, rigid and stable

A freestanding structure is...

I am going to make/ use... I need...

My structure is stable because...

My structure works/ doesn't work because...

I could make my structure stronger/ stiffer/ more stable by...

