

# Our Learning Keys

## Making Skills: Building Structures

# Design Technology

Year 3

Summer 1



### Questions

- What is a structure?
- What types of buildings can you think of?
- How can we build a structure out of different materials?



### Images



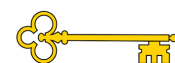
### Links

- Literacy: What existing ideas can I incorporate into my designs?
- Maths: How can I measure and cut accurately for a better finish?
- History: How have products changed and improved over time?



### Vocabulary

structure	Something that has been built
building	A home, school, cottage or other type of structure
construction	To build a structure
stiffen	To make a material stronger
reinforce	To add extra strength to a material or join by layering materials.



### Skills

**Design** - Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups. Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design.

**Make** - Select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately. Select from and use a wider range of materials and components, including construction materials and textiles according to their functional properties and aesthetic qualities.

**Evaluate** - investigate and analyse a range of existing products. Evaluate ideas and products against their own design criteria and consider the views of others to improve their work. Understand how key events and individuals in design and technology have helped shape the world.

**Technical knowledge** - Apply their understanding of how to strengthen, stiffen and reinforce more complex structures. Understand and use mechanical systems in their products (for example, gears, pulleys, cams, levers).

**Tools** - select appropriate materials and tools for their design. Scissors, rulers, hole punches.

**Joining** - glue, tape, paper clips, tying, split pins, paper mache, linkages]

Previously...

In Year 2 we used a variety of joining techniques to improve stability of our designs.

Year 3

Summer Term  
Making Skills

Next...In Year 4 we will learn about pulleys and levers to make moving parts. We will also learn how to incorporate circuits for lights or motors.

Doors this will open...

Engineer

Architect

Builder

Designer

Teacher

