

Year 1
Summer Term
Design Technology



# Playground Structures



### **Background information**

Children will discover that there are many different structures and that these can be made and used in different ways for different purposes. We look at purpose, strength and safety of playground equipment focussing on materials, mechanisms and how the parts are joined together.

We will work through a series of skill stages and finally apply our learning to designing and making our own playground structures.

Links: This follows on from our science 'Materials' topic and links to our 'Brilliant Batford' geography topic – where we will visit Batford Springs play area.

#### **Knowledge and Understanding**

In this unit pupils will learn...

- To investigate real structures and mechanisms.
- To ask and answer questions about how structures are made for a specific purpose.
- That there are different ways in which materials can be joined to give them strength for different purposes.
- To try out different tools and techniques.
- To use tools safely.
- To make decisions about their own work and apply what they have learnt to decide on their own design.

## **Enquiry skills and Key concepts**

- Use evidence from real life examples to make decisions about their own work.
- To investigate and describe real life structures and mechanisms.
- Plan their own work taking inspiration from what they have learnt throughout the unit and real design examples.
- Explore tools and techniques.
- To express opinions and evaluate work using the appropriate vocabulary and suggest how they could change their work to improve it.

#### **Key Vocabulary:**

Structure - a building or other object (playground equipment) constructed from several parts

Mechanism – the parts of a machine or item that make it move

Product – an item made for a purpose, which can often be bought or sold.

Stable/stability - not likely to give way or overturn; firmly fixed (strong)

Construct – to build or make something

Design – an idea that is used to plan a product for a purpose (often a drawing)

Lever – a bar that pivots on a fixed point allowing movement

Pivot – a point or pin on which something can turn

