

# Half Termly Curriculum Highlight Subject: Design Technology

















### Meet the Subject Lead



#### **Jocelin Bennett**

Jocelin, our Art teacher at Oswald Road, has led the Design Technology department since returning from maternity leave last year. Her passion for design extends beyond the art room; she also teaches part-time digital design at a secondary school and works as a freelance graphic designer. Currently updating Oswald Road's entire DT curriculum, Jocelin is excited to share the new units in the near future.

## The Design Technology Curriculum

Design Technology challenges children to think, problem solve and explore new ideas through being creative. It is a subject which nurtures our next generation of innovators and problem solvers.

DT at Oswald Road follows the National Curriculum. Children are offered a wide range of opportunities which allow them to meet or exceed their age related expectations. We always aim for the curriculum to be delivered as enquiry based learning. It is our aim to allow children to make links and connections which will cement DT's real world relevance. We consider this to be a good way for the children to develop their wider general knowledge of the world and to develop into well rounded young people.

The Design Technology curriculum, at Oswald Road, is split into 6 areas:

#### **Cooking and Nutrition**

As part of their learning with food, children are taught how to cook applying knowledge of nutrition and healthy eating. Children will learn about the different food groups as well as flavours. They will explore eating seasonal food, and what this means for the environment as well as adapting existing recipes and developing their own recipes.

#### **Mechanisms**

This involves learning about pulleys, sliders and levers, wheels and axles and more. Children will explore what uses a mechanism and how these work. They will then design and make their own model or structure which uses a mechanism.

#### **Structures**

Children learn about different types of structures, such as bridges, towers, and buildings, and how they are designed to support weight and withstand forces. We explore the properties of different materials, such as strength, flexibility, and durability.

#### **Textiles**

Children learn to identify and name a range of common fabrics, such as, cotton, wool and silk. They develop basic sewing skills, such as, threading a needle, sewing a running stitch and sewing a button. Children go on to design and make simple textile products, such as, a puppet, small soft toy and a waistcoat for a soft toy.

#### **Electrical Systems (KS2)**

In Key Stage 2, children are introduced to the exciting world of electrical systems and how to incorporate electricity into their designs to make products that are functional and engaging. The key concepts explored: simple circuits, switches, components and safety.

#### Digital World (KS2)

In Key Stage 2, the 'digital world' strand focuses on how technology can be used to design, make and control products. The Computing curriculum explores these concepts and there are opportunities for children to create their own interactive games using software like Scratch.

The structure of each unit is based on the 4 strands of the curriculum: design, make, evaluate, technical knowledge. These are revisited and developed in each project.

## Design Technology at Oswald Road

All Design Technology projects, in KS1 and KS2, are taught by class teachers over a full day, or split between two.

In EYFS (Early Years Foundation Stage - Nursery and Reception), children are offered a wide range of experiences in the continuous provision environment as well as discreet teaching of new skills such as using scissors or joining materials with glue or tape. Children have the opportunity to experiment with a wide range of materials and resources and are given time to revisit theses to deepen their understanding. We also aim to allow the children to develop their own ideas. Children are encouraged to design for meaningful purposes. For example, can you use the Duplo to build a house for the teddy?

	Autumn	Spring	Summer
Year 1	Textiles	Construction	Cooking and Nutrition
Year 2	Textiles	Mechanisms	Cooking and Nutrition
Year 3	Textiles	Mechanisms	Cooking and Nutrition
Year 4	Textiles	Cooking and Nutrition	Electrical Systems
Year 5	Textiles	Cooking and Nutrition	Structures
Year 6	Textiles	Structures	Cooking and Nutrition