Our LKS2 Design and Technology Learning Journey

Y4

Mechanical Systems - Levers and Linkages

In this unit, pupils are introduced to simple electrical systems, including circuits and switches. They explore how to use components such as bulbs, switches, cells and batteries to design and create a functional nightlight for a younger child who is afraid of the dark. As part of their learning, pupils research existing nightlights and the work of Thomas Edison, using this knowledge to inform their own designs for a specific user.

Here, pupils explore how levers and linkages can be combined to create mechanical motion to animate a puppet. They begin by using annotated sketches and prototypes to develop, refine and communicate their design ideas. Following this planning phase, pupils construct their own moving puppet and conclude by evaluating its performance.

Electrical Systems - Nightlights

Simple Circuits and Switches

Food Technology - Soups

Healthy and Varied Diet

In this pathway, pupils explore the components of a healthy and varied diet. They research a range of vegetables, focusing on taste and texture, before preparing and creating their own nutritious soup.

Y3

Food Technology - Salads

Healthy and Varied Diet

In this unit, pupils research a wide variety of salads, exploring popular recipes from different parts of the world. They have the opportunity to taste a range of ingredients used in these salads, focusing on flavour combinations, texture and visual appeal, before designing and creating their own salad.

Here, pupils investigate book bags, considering their structure, strength, size and design. They use 2D templates to develop their ideas, before stitching the components together to create a functional and visually appealing 3D book bag tailored to the needs of the intended user.

Textiles - Book Bags

2D Shape to 3D Product

Structures - Packaging

Shell Structures

In this unit, pupils explore 'shell' structures through the study of packaging, focusing on both its purpose and structural design. They investigate a range of net designs and construction methods, then apply this knowledge to design and create their own packaging, carefully considering its intended function.