

DT Year 4

Spring Term – 17th Century Britain

Simple electrical components

Pizzas and Apple crumble

Reception: Creating with materials



Curriculum pathway:

Year 1: Pupils to design purposeful, functional, appealing products for themselves and other users based on design criteria.

Year 3: Understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors]

Year 4: Understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors]

Year 5: Apply their understanding of computing to program, monitor and control their products.

Year 6: Apply their understanding of computing to program, monitor and control their products.

Key Vocabulary:

Conductor - Materials that electricity can flow through easily

Insulator - A material which does not easily allow heat and/or electricity to pass through it

Switch - A switch is used to make or break a complete circuit

Wire - A long, thin and flexible piece of metal

Conceal - Cover or keep from sight

Current - A steady flow of electrons

Battery - A sort of container that stores energy until it is needed

Cell - Electrical power supply

Key Questions:

What is the purpose of an electric switch?

Which materials should we use to make our switch?

What different types of switches are there?

How can we conceal our circuits?

How do we make sure our circuit is safe?

Key Facts:

An electric switch is used to control the flow of electric current.

If the switch is allowing the current to flow, the electric item will be on.

If it is not allowing it to flow, the electric item will be off.

To make a switch, we need to use materials which are insulators and conductors so that the electricity will pass through.