

Mortimer St. Mary's Project Overview



Bright Sparks (2-4 weeks)



Rationale

To use their knowledge of electrical circuits to design, make and evaluate their toy. As part of the work in English the children will learn about persuasive adverts and then make one for their toy.

Hook

What kind of toys did your parents or grandparents play with? Share an old fashioned, boring toy. How could we improve it? What sort of games do you use a lot now? Include the use of electrical component in the toy.

Outcome

To design and make a toy (that is going to be the new Christmas craze) which includes an electrical component - buzzer. Have an exhibition of the toys and ask another year group to come and play their games.

Learning Powers: Communication and creativity.

Lead 1: Science

Understand where electricity comes from (natural sources, manufactured)

Understand differing sources mains, battery and identify appliances that use power

Experiment with a range of electrical components to create a circuit which lights a bulb or sounds a buzzer

Draw these circuits using pictorial representation

Develop an understanding of how switches work

Learn about insulators and conductors

Lead 2: English

Understand why persuasive adverts are so effective

Explore adverts and look at their features catchy slogan, endorsements, special offers, alliteration, hyperbole, bright colours, text which stands out.

Create a persuasive advert for their toy

Lead 3: DT

Evaluate existing products for how they have been made, their appeal

Use a design brief to create an annotated plan for their own game

Create a paper pattern to think about shape size and ways to join

Use their knowledge of circuits and electrical components in their game.

Evaluate their product against the design brief

Application Subject: History

They will research the history of toys, using this research to inform their design for a toy.

Application Subject: PSHE

They will learn about keeping safe when using electricity

Visits and Visitors N/A**Role Play**

Safety scenarios relating to electrical safety

Family Learning

To create an information poster about electrical safety