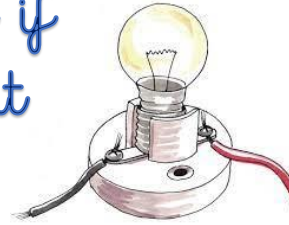


### Launch:

The children will attempt to identify the components of an electrical circuit, recognise symbols and construct a working circuit. They will propose their own questions to investigate over the unit.



## How do you know if an electrical circuit will work?



### Key dates:



6<sup>th</sup> & 8<sup>th</sup> November: Parent consultations  
27<sup>th</sup> November: Town planner visiting  
29<sup>th</sup> November: 4EG class assembly  
4<sup>th</sup> December: Topic challenge due in

### Topic Overview:

As scientists, the children will learn how to construct simple series electrical circuits, identifying the key components, including cells, bulbs and switches. They will identify whether or not a lamp will light in different series circuit scenarios. The children will also learn how to identify appliances that run on electricity and recognise some common conductors and insulators. In design and technology, the children will create series and parallel circuits in further detail. They will use this knowledge to help them design seasonal decorations at the end of the half term. As geographers, the children will continue to describe key aspects of human geography, looking at land use in different settlements in further detail, asking and answering questions about the physical and human characteristics of a location. As historians, the children will describe the social, ethnic and cultural diversity of further civilisations, leading us into our unit on Ancient Egypt in the Spring Term. They will describe the characteristics of the past and suggest suitable sources of evidence for historical enquiries.

### Key Vocabulary:

series & parallel circuit  
electrical component  
cell                      buzzer                      switch  
appliances              settlements              sources  
civilisation              empire                      diversity  
design                      evaluation

### Learning Conversations:

Take your child for a tour of your house, identifying electrical items and sources of electricity. Talk to them about being safe around electricity in and out of the home.

### Drivers

Aspiration: A town planner will be coming into school to speak to the children about working as a town planner and to answer questions based on their settlements work in geography.



Enquiry: The children will pose and answer questions about the impact of including or excluding electrical components on how electrical circuits work.



### Topic Challenge:

We would like the children to produce a poster on electrical safety in the home, based on their learning in science. Your teacher will provide some guidance on this. We are inviting Redhill Fire Service to judge the winning entries.

Please submit your entry to your teacher by Monday 4<sup>th</sup> December

### Useful links:

<https://wintonprimary.uk/year-4/> Curriculum Guidance  
[trockstars.com/](http://trockstars.com/) Times Table Rock Stars  
<https://www.oxfordowl.co.uk> Oxford Reading Owl

### Did you know...

... that one single lightning bolt can produce enough electricity to supply 200,000 average sized homes?



### Landing:

The children will make seasonal decorations with electrical circuits, incorporating their knowledge from the half term's science lessons.

