

Lightening spark

Location

First floor, Curiosity zone exhibition

In a nutshell

Create a 10,000V spark of lightening using this exhibit



What to do

Press the red button to send 10,000V between the copper rods to create a spark of lightening.

Time Required

KS1 & KS2 2-3 minutes per student.

What's happening?

Air is not a good conductor of electricity however if a large enough voltage is supplied a path through the air will be formed. This can be seen as the lightening like beam between the copper rods (electrodes). This beam heats the air molecules. As hot air rises the spark travels up the rods getting longer as the gap between the copper electrodes increases.

Curriculum links

KS1/2	Science - Electricity
	- (Yr4) recognise some common conductors and insulators, and associate metals with being good conductors
	English - Spoken language
	- give well-structured descriptions, explanations and narratives for different purposes, including for expressing feelings
	- use spoken language to develop understanding through speculating, hypothesising, imagining and exploring ideas
	Mathematics - Number – number and place value
	- (Yr 5) read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit
	- (Yr 6) read, write, order and compare numbers up to 10 000 000 and determine the value of each digit

Relates to:

Workshops & Theme Days	Shows	Trails	Other exhibits
<ul style="list-style-type: none">Electricity Unearthed (KS2)Scribble Bots (KS2 lower)	<ul style="list-style-type: none">Light Fantastic (KS2)		<ul style="list-style-type: none">Store itPower a brain

