




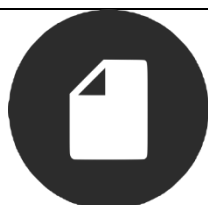


Electric Circuits

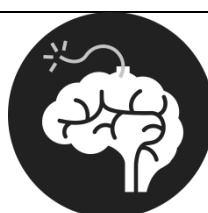
Keywords	Level	Time	Core Skills	Type of Activity
				
Electric circuits	Senior Primary 4 th - 6 th	1 - 2 hours	Designing and making	Science experiments

Brief Description



Students are introduced to electronics and electric circuits. Classroom kits with plug-and-play components will be used, with no tools or soldering required. Students will use electronics to control light and motors, create alarms and solve real world situations.

Learning Objectives and Curricular Links







Through investigation the child should be enabled to investigate current electricity by constructing simple circuits.

Strand: Energy and forces Strand unit Magnetism and electricity
3rd /4th

- learn about electrical energy
- investigate current electricity by constructing simple circuits
- examine and group materials as conductors and insulators
- become aware of the dangers of electricity

5th/6th

- investigate current electricity by constructing simple circuits
- become aware of how some common electrical appliances work
- become aware of and understand the dangers of electricity

	<p>Materials</p> <p>Brainbox kits – hands on snap circuit kits</p> <p>Instruction sheets and guides</p>
	<p>Background Information / Skills required</p> <p>Background information for teachers: https://www.sciencespace.ie/wp-content/uploads/2018/12/2002_electricity.pdf</p> <p>Children’s Skills: fine motor skills to manipulate small kit components</p>
	<p>Summary Activity Description</p> <ol style="list-style-type: none"> 1. Explore how to construct a variety of circuits with Brainbox snap circuits 2. Role of the fuse in safety 3. Design circuits to solve real world problems
	<p>Additional Information / Follow on Activities</p> <p>Electricity and simple circuits are explored in the following DPSM activities:</p> <p>https://www.sfi.ie/site-files/primary-science/media/pdfs/col/dpsm_traffic_lights_activity.pdf</p> <p>http://www.sfi.ie/site-files/primary-science/media/pdfs/col/make_a_lighthouse.pdf</p> <p>http://www.sfi.ie/site-files/primary-science/media/pdfs/col/electric_quiz.pdf</p> <p>http://www.sfi.ie/site-files/primary-science/media/pdfs/col/motor_vehicles.pdf</p> <p>This online activity outlines the history of electricity and has several interactives to allow students to explore electricity and circuits: http://thefusebox.northernpowergrid.com/page/electricity/index.cfm</p>