




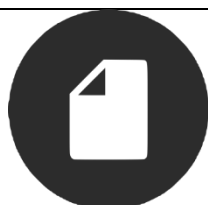


# Electric Circuits

Keywords	Level	Time	Core Skills	Type of Activity
				
Electric circuits	Senior Primary 3 <sup>rd</sup> - 6 <sup>th</sup>	1.25 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><b>Materials</b></p> <p><a href="#">Brainbox kits</a> – hands on snap circuit kits</p> <p>Instruction sheets and guides</p>
	<p><b>Background Information / Skills required</b></p> <p>Background information for teachers: <a href="https://www.sciencespace.ie/wp-content/uploads/2018/12/2002_electricity.pdf">https://www.sciencespace.ie/wp-content/uploads/2018/12/2002_electricity.pdf</a></p> <p>Children’s Skills: fine motor skills to manipulate small kit components</p>
	<p><b>Summary Activity Description</b></p> <ol style="list-style-type: none"> <li>1. Explore how to construct a variety of circuits with Brainbox snap circuits</li> <li>2. Role of the fuse in safety</li> <li>3. Design circuits to solve real world problems</li> </ol>
	<p><b>Additional Information / Follow on Activities</b></p> <p>Electricity and simple circuits are explored in the following DPSM activities:</p> <p><a href="https://www.sfi.ie/site-files/primary-science/media/pdfs/col/dpsm_traffic_lights_activity.pdf">https://www.sfi.ie/site-files/primary-science/media/pdfs/col/dpsm_traffic_lights_activity.pdf</a></p> <p><a href="http://www.sfi.ie/site-files/primary-science/media/pdfs/col/make_a_lighthouse.pdf">http://www.sfi.ie/site-files/primary-science/media/pdfs/col/make_a_lighthouse.pdf</a></p> <p><a href="http://www.sfi.ie/site-files/primary-science/media/pdfs/col/electric_quiz.pdf">http://www.sfi.ie/site-files/primary-science/media/pdfs/col/electric_quiz.pdf</a></p> <p><a href="http://www.sfi.ie/site-files/primary-science/media/pdfs/col/motor_vehicles.pdf">http://www.sfi.ie/site-files/primary-science/media/pdfs/col/motor_vehicles.pdf</a></p> <p>This online activity outlines the history of electricity and has several interactives to allow students to explore electricity and circuits:  <a href="http://thefusebox.northernpowergrid.com/page/electricity/index.cfm">http://thefusebox.northernpowergrid.com/page/electricity/index.cfm</a></p>