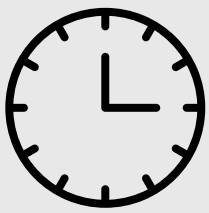
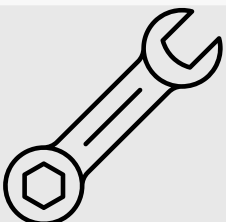
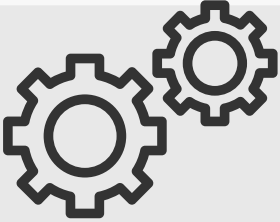


Circuits

Image credit: Alan Giltinan BCO

Keywords	Level	Time	Core Skills	Activity Type
				
Electric circuits	Senior Primary 4th - 6th	1.5 h	Designing and making	Science experiments

Activity Summary

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.

Children will,

- Explore how to construct a variety of circuits with Brainbox snap circuits
- Understand the role of the fuse in safety
- Design circuits to solve real world problems

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

Materials

[Brainbox kits](#) – hands on snap circuit kits Instruction sheets and guides

Background Information / Skills required

- ESA's Up, Up, Up worksheets include background information about rockets: [Teacher Guide](#) , [Pupil Worksheets](#)
- [ESA Kids](#)

Additional Information / Follow on Activities

- DPSM activities on the theme of rockets include:
- [Constructing a traffic light](#)
- [Lighthouse construction](#)
- [An electric quiz](#)
- [A toy car](#)