



Lighthouse - KS1 Challenge Sheet

Why are lighthouses needed? Design and build a lighthouse which uses a simple electrical circuit. Lighthouses appear to flash. Can you make your light flash?

Educational objective

A practical project to make a lighthouse, with a simple electrical circuit to light it.

Approach

Whole class discussion about lighthouses. An electricity workshop will focus on building a simple circuit including a 'push to make' switch to make a light flash. Group activity with children working in pairs to construct a simple circuit. The children then have the task of building a lighthouse and adding an electrical circuit to produce the flashing light.

Specific skills to be developed

Manipulative, designing and making skills, social and problem solving skills.



Cross-curricular links

History, geography, english-stories

Ideas for extension activities

Class visit to a Lighthouse

Equipment we will provide:

boxes of K'NEX

battery packs

bulbs

switches

crocodile clip wires

Subject skills / Desirable outcomes

Structures
Electricity (D&T)
Designing skills
Making skills
Control (D&T)

Life skills

Innovation skills
Problem-solving skills
Team working skills
Communication skills
A 'can-do' approach