



Sticky Knowledge

Key Knowledge

Nightlight must appeal to their target users.

A circuit is a path through which electricity passes.

Know the difference between materials that are conductors and insulators.

Know how to create a working circuit using scientific knowledge.

Designers evaluate the success of their product against the design criteria.



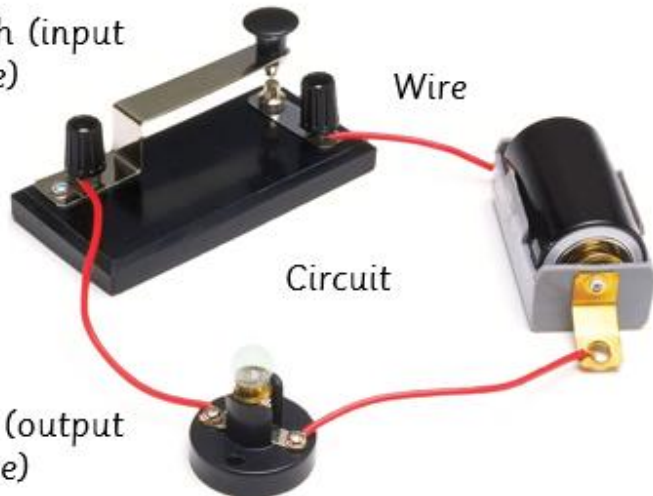
Switch (input device)

Wire

Battery

Circuit

Bulb (output device)



Design Criteria

Your nightlight should:

- Appeal to a younger child.
- Have a working electrical system.
- Be visually appealing.
- Consider health and safety issues (such as no sharp edges)
- Be sturdy.



Key Vocabulary

Circuit	Path through which electricity passes.
Conductor	A material which allows an electric current to pass through it.
Insulator	A material which does not easily allow electric current to pass through it.
Prototype	A model made to test whether a design will work.
System	A set of related parts or components that together achieve a desired outcome
Output devices	Components that produce an outcome e.g. bulbs.
Input devices	Components that are used to control an electrical circuit e.g. switches.