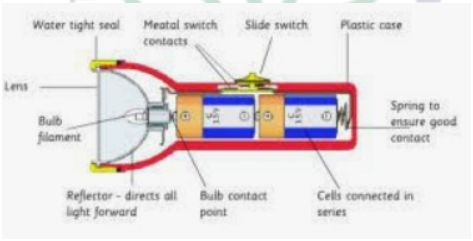
What sort of light will work for you?

Evolution

Prior Knowledge

In Science last half term, Year 5 and 6 used electrical circuits to create their own circuit.

Year 6 completed Electrical Systems sequence where they built their own buggy.



Key Vocabulary

Tier 1:

Wire, Bulb, Battery

Tier 2:

Switch, Wire. Plug. Bulb, Holder

Tier 3:

Current strippers, Insulator, Parallel circuit. Switch, Opaque, Insulation, Reflective, Transparent, Conductor

My Component Knowledge:

Lesson 1: I can find similarities and differences in a series of lights.

Lesson 2: I can identify how a torch works and can take it apart and put it back together successfully.

Lesson 3: I can create a circuit to light a bulb without using a bulb casing.

Lesson 4: I can explain how "home made" switch controls the flow of electricity.

Lesson 5: I can design my light with annotations to explain how it will work.

Lesson 6: I can construct my light following my design and suggest improvements.

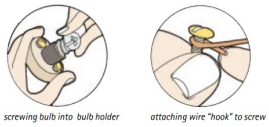
My Composite Knowledge:

To understand how torches work and to build a circuit with no bulb casing and to explain how this works.

My Powerful Knowledge:

To build my own light circuit, and to explain how my switch controls the flow of electricity.

How do torches work?

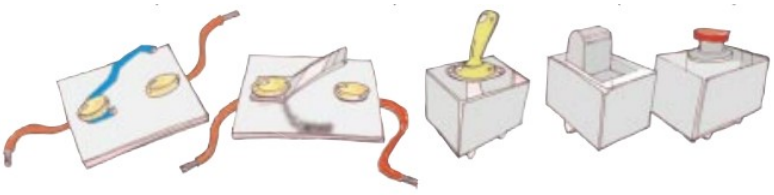

screwing bulb into bulb holder

attaching wire "hook" to screw


tightening the screw with a screw driver


stripping insulation with simple wire strippers


clipping a crocodile lead to a bulb holder



What is a disadvantage of using mains electricity?

What is an advantage of using a battery?