Th

Questions:

What is electricity? How does it work?

Do it-how do we build and represent a series circuit?

What are the components in a series circuit?

Test it-how does the number of cells and voltage affect components in a circuit?

Diagnose it-what are the effects and consequences of changing circuit components and batteries?

**Big Ideas/Substantive Concepts**

Do it

Test it

Diagnose it

Pupils should be taught to:

* associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit
* compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches
* use recognised symbols when representing a simple circuit in a diagram

**Key Vocabulary**

|  |  |
| --- | --- |
| **Tier 2** | **Tier 3** |
| component | proton |
| consequence | neutron |
| systematic | electron |
| represent | terminal |
| source | series |
| generate | voltage |
|  |  |
|  |  |
|  |  |
|  |  |

Year 6: Electricity

**Resources:** [CUSP curriculum](https://www.unity-curriculum.co.uk/history/history-ks2/) and [Curriculum vision](https://www.curriculumvisions.com/indexHistory.html) resources for online non-fiction texts

Making connections to prior learning

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| **Year 3:** Light  **Year 3:** Forces and magnets  **Year 4:** Sound  **Year 4:** Electricity |

Working Scientifically

|  |  |  |  |
| --- | --- | --- | --- |
| Plan enquiries, including recognising and controlling variables where necessary | Use appropriate techniques, apparatus, and materials during fieldwork and laboratory work | Take measurements, using a range of scientific equipment, with increasing accuracy and precision | Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, bar and line graphs, and models |
| Report findings from enquiries, including oral and written explanations of results, explanations involving causal relationships, and conclusions | Present findings in written form, displays and other presentations | Use test results to make predictions to set up further comparative and fair tests | Use simple models to describe scientific ideas, identifying scientific evidence that has been used to support or refute ideas or arguments |

**Outdoor Learning Opportunities**

Alfresco Learning: UKS2 - Working Scientifically