# Shadsworth Junior School

# Curriculum

| Year 6 Science Scheme of Work | |
|---|---|
| **Term: Aut 2** | **Topic: Science – Light/Electricity** |

**Key Skills and Knowledge:**

Light:
Light travels in a straight line.
How we see things
Reflection is when light bounces off a surface - this changes the direction in which the light travels.
Because light travels in straight lines, when there is an opaque object blocking the light, a shadow is formed. These shadows have the same shape as the objects that cast them.
Shadow size changes as light source moves
Plan, carry-out and explain a comparable fair test.

Electricity:
Know how quantities of cells affect outcome of the circuit
Compare variations in circuits and explain differences
Draw electrical symbols to represent circuits
Understand the difference between insulators and conductors.
Plan, carry-out and explain a comparable fair test.

**Reading and Writing Opportunities (Long and Short Activities)**
**Creative Ideas and Hooks**

Describe how an electrical circuit works
Plan an investigation
Write an information text
Write an explanation text
Write a short story about the journey of Light/electricity as a character.

Wow:
Role-play journey of electricity/light in yard.
Use Curious minds
Build a circuit and try to break a bulb.

**Links to PSHCE, Equality and British Values Work**

Tolerance
Respecting other peoples viewpoints

| Key Vocabulary: | Resources Available / Visits/Visitors | Useful Websites: |
|---|---|---|
| circuit, current, cell, components, switches, insulator, conductor, symbols<br><br>straight lines, opaque, translucent, transparent, shadows, reflection | Practical equipment<br>Videos/IWB<br>Role-play materials | https://www.stem.org.uk/resources/community/collection/12741/year-6-light<br>https://enjoy-teaching.com/science-videos-for-kids/light-energy-videos/<br>https://www.stem.org.uk/resources/community/collection/12390/year-6-electricity<br>https://www.bbc.co.uk/bitesize/topics/zj44jxs |
| | | Pre-Learning:<br>Identify electricity in the home<br>Make simple circuits<br>Associate open/closed switches with the lighting of a bulb<br>Identify basic materials as conductors/insulators |