

SCIENCE: Electricity & Light

What I might already know:

Electricity requires a power source. Light can only travel in a straight line.



KEY QUESTIONS:

What we will be learning:

Electricity: What happens when you add more resistors (bulbs, buzzers, motors etc) to a circuit?

Light: How fast does light travel?

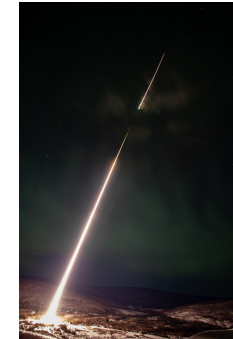
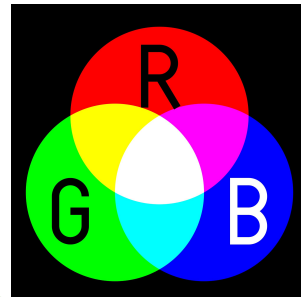
Light
 L1 recognise that light appears to travel in straight lines
 L2 use the idea that light travels in straight lines to explain that objects are seen because they give out or reflect light into the eye
 L3 explain that we see things because light travels from light sources to our eyes or from light sources to objects and then to our eyes
 L4 use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them.



Comparative and Fair Testing



Observing Over Time



???



Key Vocabulary:

- | | |
|---------------------|--------------------|
| Electricity: | Light: |
| Mains | Angle |
| Battery | Lamp |
| Circuit | Source |
| Motor | Reflect |
| Cell | Shadow |
| Conductor | Mirror |
| Insulator | Flame |
| Source | |
| Transparent | |
| Power | Translucent |
| Complete | Opaque |

Can animals see in colour? What happens to the image in our eyes?

Research Using Secondary Resources



Electricity
 E1 associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit
 E2 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
 E3 use recognised symbols when representing a simple circuit in a diagram.

