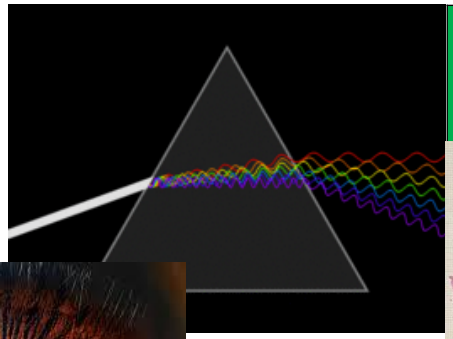
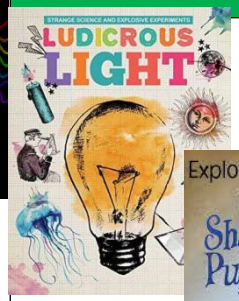
The Big Question: How can you light up your life?

LQ1	How do we know that light travels faster than sound?
LQ 2	How can you set up an experiment to show that light travels in straight lines?
LQ 3	How do your eyes work?
LQ 4	How can you use mirrors to see around blind corners?
LQ 5	Can you design an experiment to test whether something is translucent, opaque or transparent
LQ 6	Can you create a shadow puppet story and present it to others?
End Product	A shadow puppet show
Links to units.	Electricity Y4 Light and Shadow Y3 Labelling materials Y1.(transparent, opaque and translucent.) Light Y7.
Cross-curricular links.	Maths – Tables and graphs DT- Making a puppet show.



Suggested Books



Sticky Knowledge

- Light travels in straight lines
- Light can be reflected and refracted.
- The moon reflects the Sun's light
- Transparent means completely see through, translucent means partially see through and opaque means not see through.

- We see things because light travels from a source into our eye or from a source to and object and then into our eye.
- Shadows are the same shape as the object because light travels in a straight line
- The main parts of the eye are the lens, retina, iris, retina and pupil.
- Light can be defined by its wavelength and frequency.
- Frequency is how fast it vibrates up and down.
- Concave and convex lenses reflect light differently

Vocabulary

Light, sound, waves, transparent, translucent, opaque, lens, iris, cornea, retina, wavelength, frequency, concave, convex, reflect