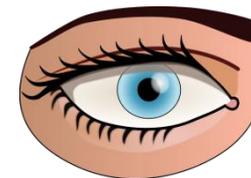


# How can you light up your life?



1. What is light and how does it travel?
2. How do we see?
3. How do our eyes work?
4. What is a shadow and how do they work?
5. What is refraction and reflection?
6. How do mirrors work and help us to see round corners?
7. How does light make colours?

## We learn the following Science knowledge and skills...

- recognise that light appears to travel in straight lines
- 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
- 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
- use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them
- explore the way light behaves including light sources, reflection and shadows
- design and make a periscope
- look at a range of phenomena including rainbows, colours on soap bubbles, objects looking bent in water and coloured filters

## We learn the following technology knowledge and skills...

- \* Internet research on the life of Louis Braille – timeline maker
- \* Scratch traffic lights
- \* produce a range of graphs in Excel about hours of daylight in different cities

## Hook for Learning:

- \*Link to WW2 blackouts and trip to Stockport Air Raid Shelters
- \*Link to RE and festivals around the World - assemblies
- \*Maths - Can you investigate hours of daylight in different cities?

## As Thinkers can we...?

- \*listen to a range of opinions and reach a conclusion
- \*use feedback from a range of sources to help solve a problem
- \*compare information and statistics to form a conclusion

## As Talkers can we...?

- \*feedback the findings from an investigation and draw a conclusion
- \*present information about light in religious festivals

## We learn the following vocabulary:

- |             |               |              |
|-------------|---------------|--------------|
| *refraction | *light source | *opaque      |
| *reflect    | *shadow       | *translucent |
| *travel     | *reflective   | *transparent |
| *direction  | *pupil        | *prism       |
| *iris       | *lens         | *concave     |
| *cornea     | *sclera       | *convex      |
| *retina     | *optic nerve  | *plane       |
| *sensors    | *function     | *mirror      |
| *light wave | *filters      |              |

## We learn the following art knowledge and skills...

- \*look at the work of several famous painters, paying attention to light, tone and shadow

## We learn the following English knowledge and skills...

- \* Non-chronological report about light in different religious festivals

## Recovery Curriculum 2020

- \*Do all animals and plants start life as an egg? (plant reproduction, life cycles of animals and plants)
- \*Will we ever send another human to the moon? (our solar system, orbits, movement of the sun, day and night)