

Light Innovation

Prior Knowledge

EYFS: Exploring a range of materials.

Year 1: Everyday materials – Construction – some materials let through light and some do not.

Year 1: D&T: Shadow puppets

Year 2: Everyday materials – Innovation – opaque, translucent and transparent. (Missed due to Covid-19 lockdown).

Where next? Future learning

Year 5: Properties and changes of materials – Innovation – thermal properties of materials.

Year 6: Light – Innovation – light travelling, reflection, refraction, retina, rods, cones and visual cortex.



My Component Knowledge:

Lesson 1: I can understand key vocabulary.

Lesson 2: I can understand what light sources are.

Lesson 3: I can use mirrors to reflect light.

Lesson 4: I can understand how to protect myself from the sun.

Lesson 5: I can understand what shadows are and how they are formed.

Lesson 6: I can use my knowledge to draw conclusions and explanations.

My Composite Knowledge:

I can understand the difference between light sources and reflectors. I can understand how shadows are formed and change over time. I can understand how to protect myself from the dangers of the sun's UV light.

My Powerful Knowledge:

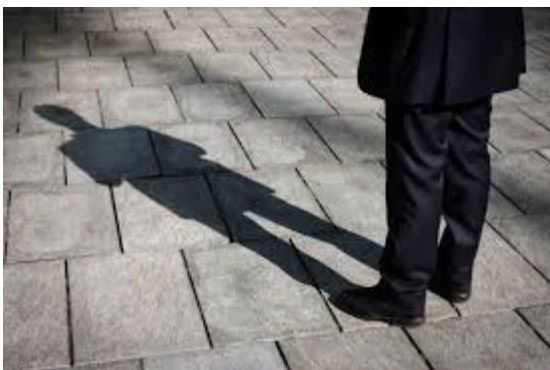
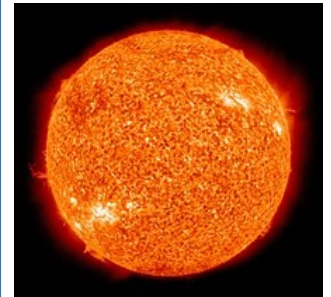
I understand that light is required to be able to see. I know that some objects are reflectors and some are light sources. I know that shadows are formed when an object blocks the light from a light source.

Key Vocabulary

Tier 1: block, light, shortest, highest

Tier 2: shadow, direction, light source, light beam

Tier 3: transparent, opaque, translucent



How does the moon shine?

How do shadows form?

What is the difference between a light source and a reflector?