



Fair testing



research



Observation over time

LIGHT



Pattern seeking



Identify and classify



Problem solving

Lesson 1 identify the difference between light sources and non light sources.
Is the moon a light source? Explain your answer.



Natural, artificial, source, light,

Lesson 2 Explore that light comes from the sun and how to stay safe.
How can we stay safe in the sun?



UV rays, sunburn, vitamin D, shade, exposure.



Lesson 3 explore materials which are reflective.
Why are some materials more reflective than others?



High visibility, reflective, surface materials, fluorescent

How do we see?

Size of a shadow changes

A shadow is caused when light is blocked by an opaque object. A shadow is larger when an object is closer to the light source. This is because it blocks more of the light.

source opaque object umbra screen

source opaque object umbra screen

Key Facts

We need light to be able to see things. Light travels in a **straight line**. When light hits an object, it is reflected (**bounces off**). If the reflected light hits our eyes, we can see the object. Some surfaces and materials reflect light well. Other materials do not reflect light well. **Reflective surfaces** and materials can be very useful. Remember the Sun can be dangerous.

Careers linked to this topic
Optometrist, optical scientist, light engineer

Year 3 Summer 1

Mirrors and reflection

Mirrors reflect light very well, so they create a clear image. An image in a mirror appears to be reversed. For example, if you look in a mirror and raise your right hand, the mirror image appears to raise its left hand.

TRANSPARENT
ALL light passes through

TRANSLUCENT
SOME light passes through

OPAQUE
NO light passes through

WINDOW SUNGLASSES BACKPACK

Light is reflected from surfaces

Light from the torch hits the object. The light is reflected from the object.

regular reflection irregular reflection

Lesson 4 Discover how shadows are formed. TAPS (DO)
If an object is opaque what does that mean?



Sundial, ray, block, shadow, opaque

Lesson 5 Investigate how shadows change throughout the day.
What causes shadows to change?



Opposite, position, direction, cast, length.



Lesson 6 double page spread
Use everything you have learned in this topic to produce a double page spread.
Use all previous vocab to make your double page spread.

