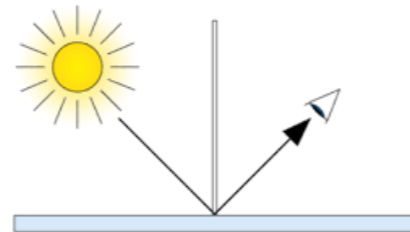




Knowledge Organiser: Science

Vocabulary

light	dark	absence	reflection	surface	natural	man-made	light source
shadow	blocked	bright	dim	mirror	absorb	plane mirror	image
concave mirror	convex mirror						



The Big Picture

What I will learn...

1. I can identify light sources.
2. I can explain the relationship between light and seeing.
3. I can experiment with light reflecting from a variety of different surfaces.
4. I can name some safety rules to avoid damaging your eyes from the sun.
5. I can observe and record the effect of blocking light with solid objects.
6. I can observe and record how the size of a shadow changes when the light source is moved closer or further away from the object, causing the shadow.

Links to future topics...

Year 6

- I know how light travels.
- I know how light reflects.
- I know how light refracts.
- I know how the size of a shadow changes.

Year 3: Light

'Know That' Statements

By the end of each lesson, I will know and retrieve that...

Lesson 1

- We need light to see things.
- Light is a form of energy.
- There are natural and man-made sources of light.
- Dark is the absence of light.

Lesson 2

- Light enters the eyes through the pupil.
- The retina captures the light that enters the eyes.
- The optic nerves relay messages from the eyes to the brain.
- The iris controls the pupil, which helps the eyes see clearly.

Lesson 3

- That sunlight contains UV light.
- That we can't see all the types of light that come from the sun.
- The visible spectrum is the name for the light we can see.
- The visible spectrum is made up of the colours of the rainbow, which include red, orange, yellow, green, blue, indigo and violet.
- We should never look directly at the sun as our eyes can be damaged very quickly.
- We should wear sunglasses with a high UV rating when we are out in the sun.

Lesson 4

- The reflection of light is when a ray of light approaches a smooth polished surface the light bounces back.
- A reflective surface reflects light well. Most of the light that hits the surfaces bounces off it.
- Non-reflective surfaces don't reflect light well. Some light bounces off the object but most of the light is absorbed.
- Light travels in straight lines.

Lesson 5

- That opaque or solid objects block light.
- Shadows are formed when an opaque object or material is placed in the path of rays of light.

Lesson 6

- That the distance between a light source and an object determines the size of the shadow created.
- That when the light source is nearer, the shadow will be larger.