

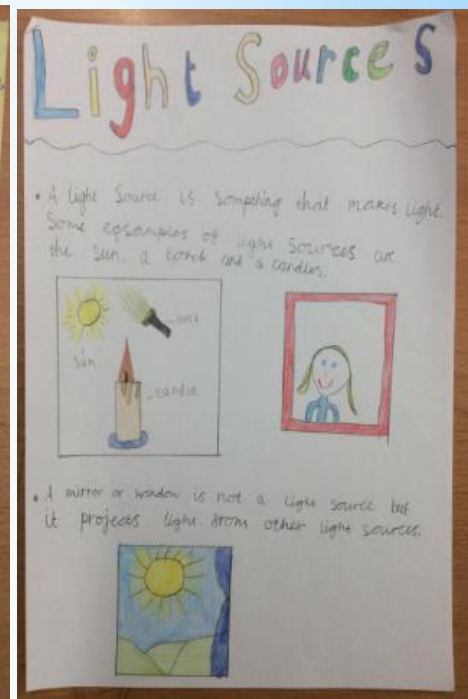
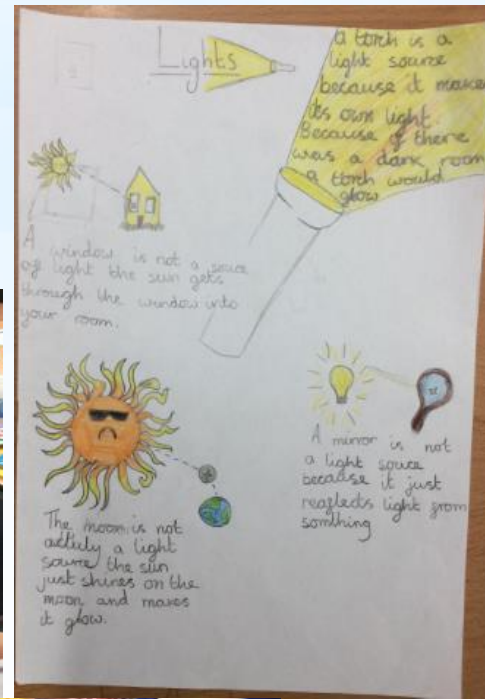


Class Tamar

Science

Light

We learnt that there are a huge range of different light sources and were able to identify these light sources around the school.



We played a 'what's in the bag?'...

The only way we can see the objects is if we open the bag!

If we open the bag it'll let light in and we will see what the object is.

Darkness is the absence of light!

We learnt about reflective surfaces. We each brought our coats into the classroom and used torches to see how reflective these are.



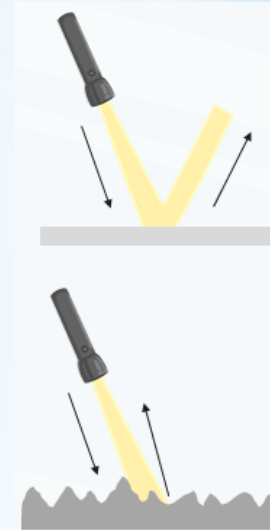
Reflective surfaces have to be smooth, shiny and flat!



If you wear reflective clothes at night near roads, cars will see you with their headlights.



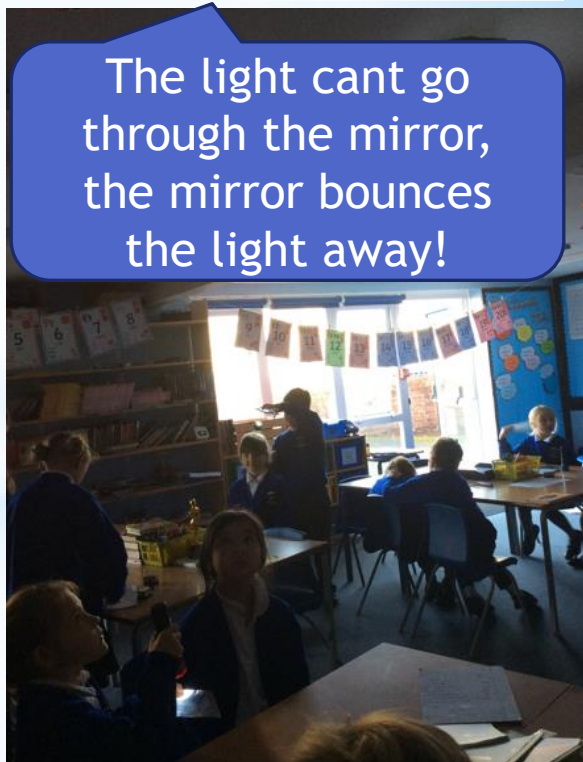
We learnt about the importance of wearing reflecting clothing near roads when it is dark outside.



When the light rays hit the smooth mirror, they all bounce off at the same angle, creating a clear reflection.

When the light rays hit a rough surface, they scatter in all different directions, so it doesn't reflect well.

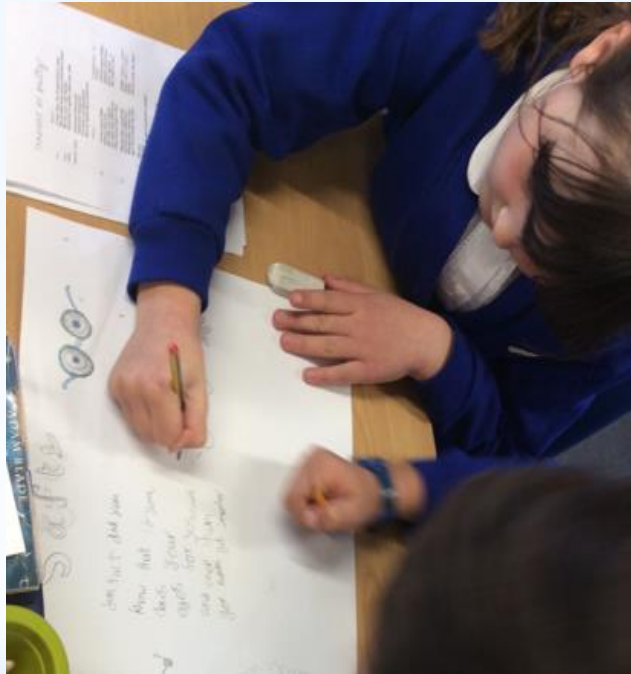
We used mirrors to reflect beams of light onto other surfaces. This showed us that light travels in straight lines!



The light can't go through the mirror, the mirror bounces the light away!



We learnt that light from the sun can be dangerous and that there are ways we can protect our eyes.



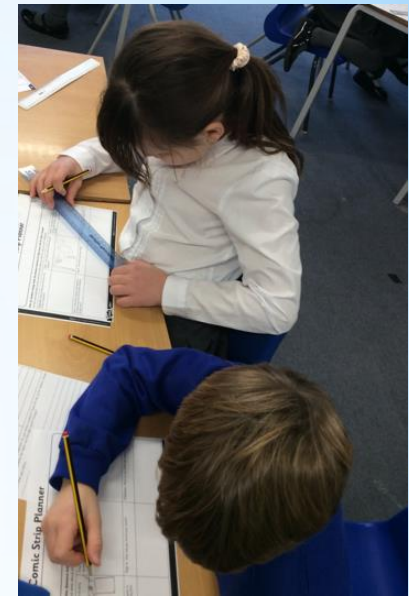
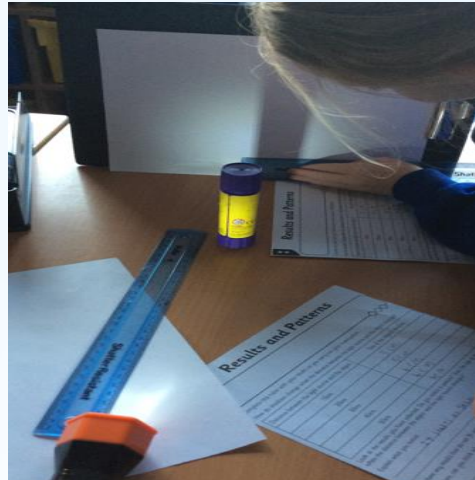
We observed how our pupils change when we let in more light into our eyes.



When the light turns on
our pupils get smaller!

When the light turns
off our pupils got
bigger.

We planned and set up an experiment to test how shadows change in different light.



We thought carefully about how we will make this a fair test.

We have to make sure that we keep the object in the same place each time we move the light away.

We must make sure that we measure it in the same way for each go.

We recorded our findings and concluded that shadows get smaller as the light source gets further away.

Science

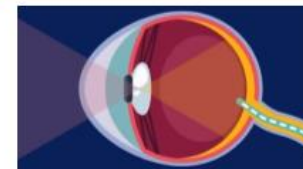
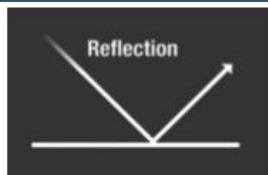
FLE Y3/4

Light

What I have learnt before:

I know different light sources.

I know how shadows can be made.



Forever Facts

We need light to be able to see things.

Light travels in straight lines. When light hits an object, it is reflected (bounces off). If the reflected light hits our eyes, we can see the object.

Some surfaces reflect light well and some do not. Reflective surfaces can be very useful (for example, hi-vis jackets).

Mirrors reflect light well, so they create a clear image.

The surface that reflect light best are smooth, shiny and flat.

A shadow is caused when light is blocked.

The pupils control the amount of light entering the eyes. If too much light enters then it can damage the retina. To help protect our eyes, you can wear a hat with a wide brim and sunglasses with a UV rating.

Skills

I can begin to make theories and provide explanations using scientific language.

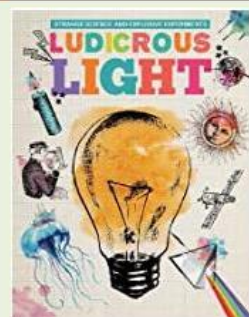
I can record findings using scientific language.

I can make and record observation.

I can make careful observations and comparisons.

I can ask relevant questions,

Exciting Books



Our Endpoint

To use scientific vocabulary to explain my findings to an investigation about changing shadows.

Subject Specific Vocabulary

| | |
|--------------|---|
| light | A form of energy that travels in a wave from a source. |
| dark | The absence of light. |
| shadows | An area of darkness where light has been blocked. |
| Light source | An object that makes its own light. |
| reflection | The process where light hits the surface of an object and bounces back into our eyes. |
| reflect | The bounce off. |
| reflective | This word describes something which reflects the light well. |
| ray | Waves of light are called light rays, they can also be called beams. |
| pupil | The black part of the eye which lets light in. |
| retina | A layer at the very back of the eye. The retina takes the light the eye receives. It then changes it into nerve signals to send to the brain. |

Culture capital: Children will gain skills to be able to understand and communicate scientific concepts.