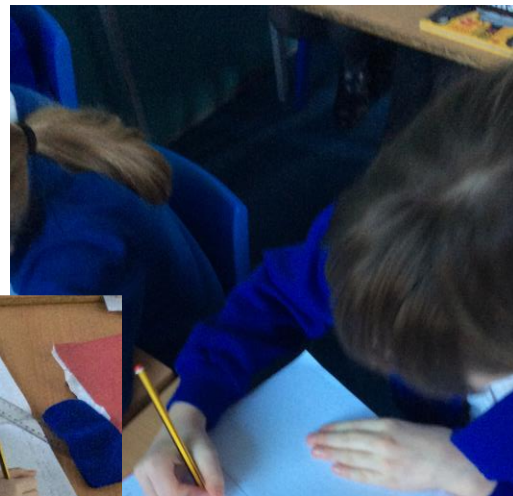
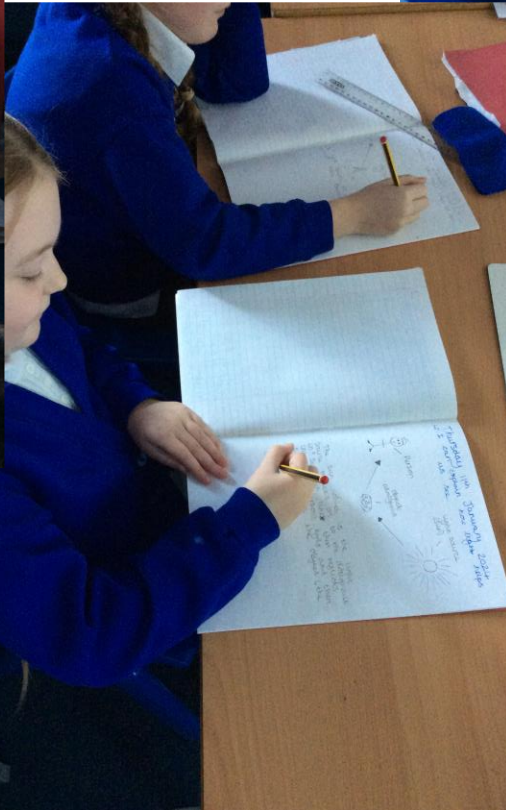


# Science

**How does light enable us  
to see?**

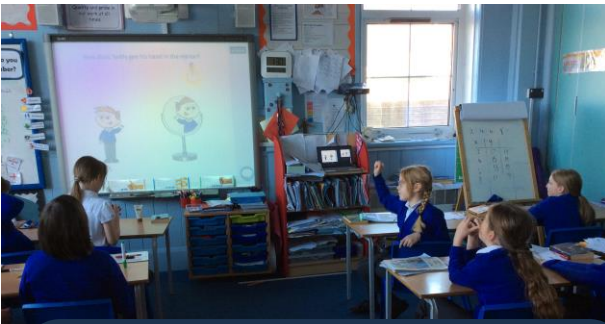
We began by reviewing what a light source is and why the moon is not one. We then learnt how light travels in order for us to see and looked at how you could show this in a ray diagram. We drew our own and explained it in our books before using torches and card to explore light travelling in straight lines.



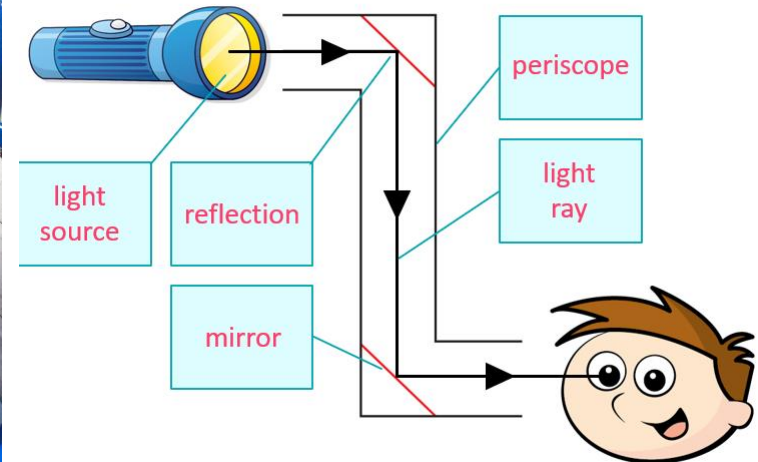
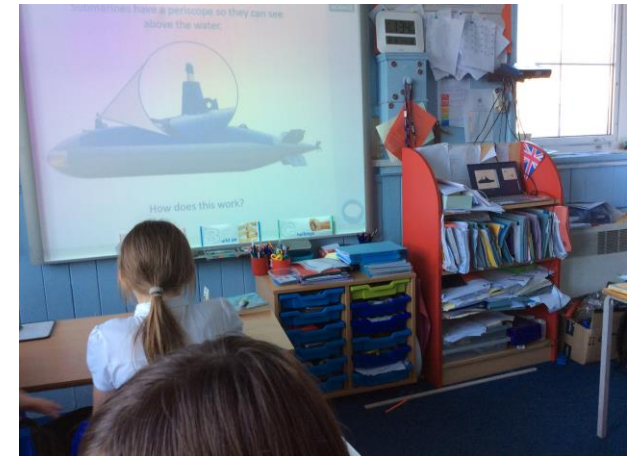
We needed to remember that in our explanations it was the light from the light source not the light source itself that travels to the object and into your eyes.



LO: I can use knowledge of how I see to explain how a periscope works  
In this lesson we recapped how we see and then thought about how it would work with a mirror. We then looked at a real life use for this in a submarine periscope. We looked at a ray diagram of this and then created our own periscopes.

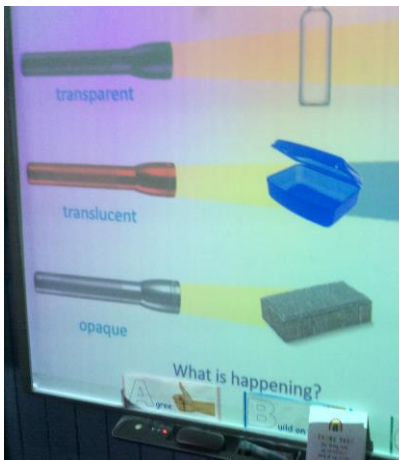


We could use our periscopes to spy on people.

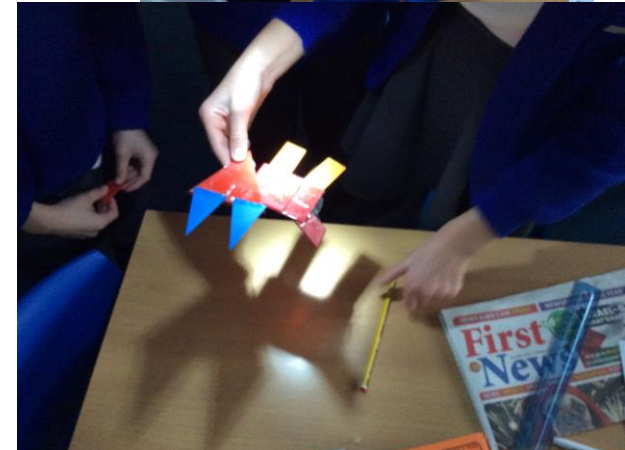


LO: I know that because light travels in straight lines, a shadow will take the form of the object that casts it

We looked at what would happen if a light was shone at transparent, translucent and opaque objects. We then discussed what a shadow is. We recapped our work in Tamar and knew that the closer a shadow was to the light source, the bigger the shadow. We then experimented with shapes to make specific shadows.



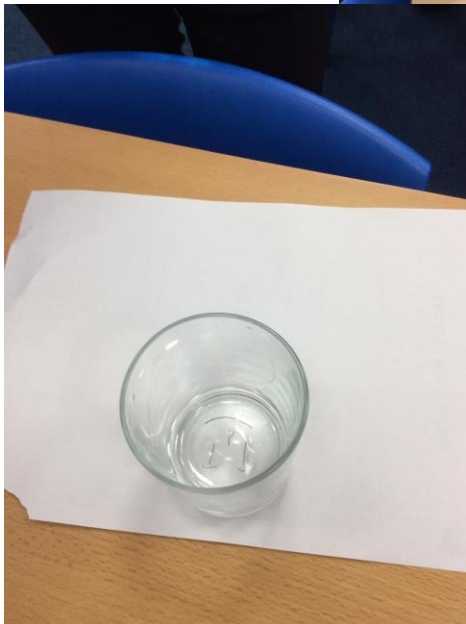
I had to choose my shapes carefully to make the shadow the shape of the animal I picked.



LO: I can observe light phenomena

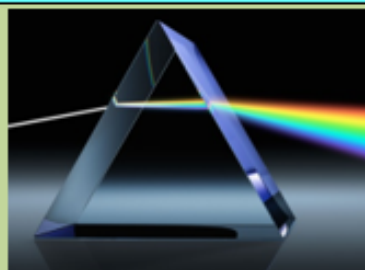
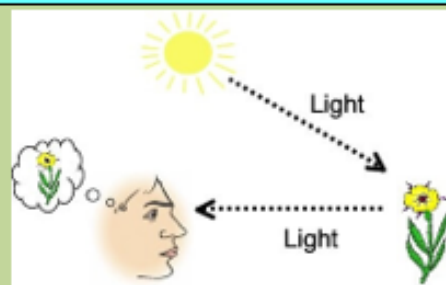
In this lesson we looked at what happens when you shine light through water. We tried two different activities. Then we learnt what Sir Isaac Newton found out about white light and tried it out for ourselves.

My arrow flipped over when I put it behind the glass. The light bends.



When we shone the torch at the prism we made a rainbow.



**What I have learnt before:**

I have learnt about light and dark

I have learnt how shadows change through the day

**Forever Facts**

Light travels in straight lines

Objects are seen because they give out/reflect light

We see because light reflects from an object and into our eye

Shadows have the same shape as the object blocking the light

**Skills**

I can make observations and conclusions

I can answer questions based on my learning

I can support my ideas with known facts

I can use straight forward scientific evidence

I can identify scientific evidence used to support/refute ideas

**Exciting Books****Our Endpoint**

I can explain how we see. I have experienced light phenomena to explore how we see

**Subject Specific Vocabulary**

light source	anything that makes light, whether natural or artificial
reflect	throw back without absorbing it
straight line	a line traced by a point travelling in a constant direction
periscope	an apparatus using mirrors or prisms which allows you to see things that are otherwise out of sight
transparent	allows light to pass through so that objects can be distinctly seen
opaque	not able to be seen through
shadow	a dark area or shape produced by something

**Personal Development**

The jobs it can be used in are: Optician, Staging, Film production. Children appreciate the awe and wonder of light in science