Science- Year 6

Spring 2– Light up your world

In Science, I have learnt:

That shadows are formed when the light from a light source is blocked by a solid object.
I found patterns in the way that the size of shadows change.
I used the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky.
To design my own fair test experiment to solve a problem (see Year 5 working scientifically targets)

shadow, reflect, opaque, transparent, translucent, ultraviolet, ray, beam, absorb, luminous, non-luminous, infrared.

I can use the idea that light travels in straight lines to explain that objects are seen because they give out or reflect light into the eye.

I can explain that we see things because light travels from light sources to our eyes or from light sources to objects and then to our eyes.

I can use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them.

<u>Working Scientifically</u>
I can generate my own questions about mirrors.

I can design my own experiments to solve a problem:

- **My prediction says what I think will happen and why. I have used a range of scientific vocabulary, diagrams and have drawn on my prior experiences, including previous experiments in this topic.**
- **I select appropriate equipment to use considering accuracy and precision.**
- **I can identify if the experiment is a 'fair test' experiment. If so, I can identify what needs to be changed, stay the same and measured.**
- **I can decide how to record my results. I can identify whether I need to repeat part of the experiment to get accurate data.**
- **I can draw a conclusion based on my results and say whether this supports my prediction. I can explain patterns and relationships I find in my results.**
- **I can evaluate my experiment and suggest improvements.**

<u>Scientific enquiry type:</u>
Grouping and classifying
Fair test

New Science words:

Refraction, periscope, spectrum, dispersion, inverted, medium, **transparent, translucent, opaque.**