

Light

Sun produces its own light



The Sun is a yellow dwarf star at the centre of our Solar System. We can see the Sun more clearly because it is the closet star to the Earth. The Sun produces its own light so it can be seen as long as we are facing it.

Remember: Don't look directly at the sun as it can damage your eyes!

Key Vocabulary: Science

Light	Makes things visible.
Light source	Something that creates light. Light comes from different sources, like lamps, bulbs and the sun.
Reflective	Term used to describe materials that reflect light.
Reflect	When light hits an object it is reflected (bounces back) and enters our eyes.
Mirror	A surface, typically of glass coated with a metal mixture, which reflects a clear image
Shadows	A dark area or shape produced by an object coming between rays of light and a surface.

Reflecting Light



The Moon does not make its own light, so we can only see it when the Sun's light reflects off its surface.

Over 28 days the moon goes through The phase of the moon is how much of the moon appears to us on Earth to be lit up by the sun. Half of the moon is always lit up by the sun, except during an eclipse, but we only see a portion that's lit up. This is the phase of the moon.

Light can reflect off a variety of surfaces. The best **surfaces** for **reflecting light** are very smooth, such as a glass mirror or polished metal, although almost **all surfaces** will **reflect light** to some degree.



Darkness: The absence of light



A lunar eclipse is when the Earth is exactly between the Moon and the Sun so none of the Sun's rays can hit the moon.

A solar eclipse is when the moon exactly blocks the Sun's rays from hitting the Earth. Everything becomes dark because there is an absence of light



Sundial

A sundial is a device that tells the time of day when there is sunlight by the position of the Sun in the sky. It consists of a flat plate (the dial) and a gnomon, which casts a shadow onto the dial. The shadow cast points to the hour on the dial to show the time.

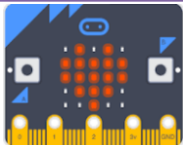


On a sunny day draw round your shadow and see how it moves later in the day.

Did you know a sundial has been discovered from the Bronze Age?

Light

Coding - Micro:bits



Coding with Micro:bit uses block coding to build creative projects that combine the magic of the digital and physical worlds. L.E.D (Light Emitting Diodes) are programmed to light up and dim to create messages and images. Accelerometers are used to create a 'shake' function. Buttons complete a circuit to provide a variety of functions created by the code.

Poetry

- Rhyme – Using words with matching sounds.
 - Stanza – a verse in a poem.
 - Metaphor – Where one thing represents another.
 - Personification – Showing an inanimate object, animal or nature with human behaviour.
 - Onomatopoeia – Where words echo their meaning. E.g. 'snap'.
 - Rhythm – The beat and pace of the poem.
 - Theme – The subject the poem is about.
- Michael Rosen, Berlie Doherty, Gervase Phinn, Karla Kuskin, R.L Stevenson and Charles Causley are the poets we are focusing on.

Maths: Vocabulary

Division	To share a number or objects into equal groups.
Dividend	The number that will be shared into groups. (e.g. the number 24 in the number sentence: $24 \div 4 = 6$)
Divisor	The amount you are sharing by. (e.g. the number 4 in the number sentence: $24 \div 4 = 6$)
Quotient	The result obtained by dividing one number by another. (e.g. the number 6 in the number sentence: $24 \div 4 = 6$)
Remainder	The number which is left over in a division in which one quantity does not exactly divide another, for example $23 \div 3 = 7$, remainder 2.
Fractions	A numerical quantity that is not a whole number (e.g. $\frac{1}{2}$).
Numerator	The number above the line in a fraction showing how many of the parts indicated by the denominator are taken, for example, 3 in $\frac{3}{4}$.
Denominator	The number below the line in a fraction (a divisor), for example, 4 in $\frac{3}{4}$.

Art – Silhouettes

A silhouette is a dark shape and outline of someone or something visible in restricted light against a brighter background.

The shadow can make a striking contrast to a brightly coloured background .



Art – Painting light and shadows

Julie Dumbarton is a British painter from Langholm. She paints landscapes with a rainbow of colours that show light and dark with the different shades and tones. She has her own painting studio in an old church.



Shigeo Fukuda was a Japanese artist who was famous for creating sculptures out of objects and recycled materials which formed shadows of unlikely reflections. These included people, motorbikes and buildings.

