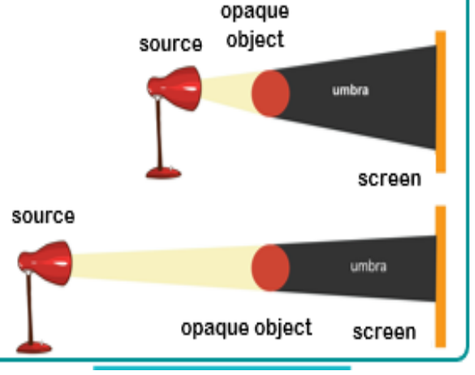
Hucknall National CE Primary School

Year 3 Knowledge Organiser

Unit: Light	Concept: 	Subject: Science

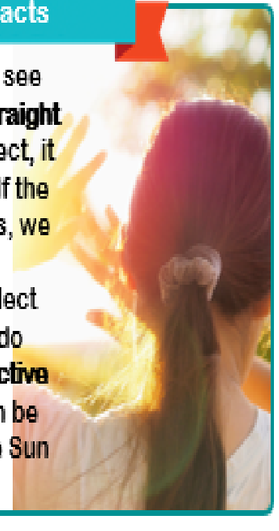
Size of a shadow changes

A shadow is caused when light is blocked by an opaque object. A shadow is larger when an object is closer to the light source. This is because it blocks more of the light.

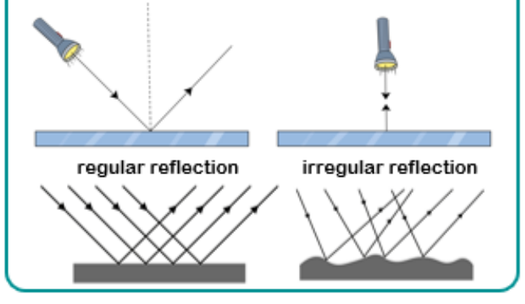


Key Facts

We need light to be able to see things. Light travels in a **straight line**. When light hits an object, it is reflected (**bounces off**). If the reflected light hits our eyes, we can see the object. Some surfaces and materials reflect light well. Other materials do not reflect light well. **Reflective surfaces** and materials can be very useful. Remember the Sun can be dangerous.

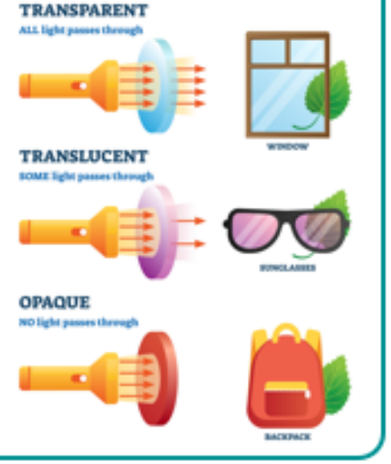


Light is reflected from surfaces



Mirrors and reflection

Mirrors reflect light very well, so they create a clear image. An image in a mirror appears to be reversed. For example, if you look in a mirror and raise your right hand, the mirror image appears to raise its left hand.



What? Key Vocabulary

light	a form of energy that allows our eyes to see
reflect	the process that describes light bouncing off a surface
vitamin D	a vitamin that come from sunlight or food and important for bone strength
ultraviolet rays	type of light that can be harmful
fluorescent	gives a highly visible reflection of light
high visibility	can be seen easily
shadow	a dark image that is formed when an object blocks the light
ray	a thin beam of light
cast	to throw or project
position	where something is placed
shape	the outline of something
puppet	a doll that looks like a person or an animal

Sequence of lessons

Lesson	Definition/Sentence
1	. Identify the difference between light sources and non-light sources
2	Explore the light that comes from the sun and how to stay safe
3	Explore materials which are reflective
4	Discover how shadows are formed
5	Investigate how shadows change throughout the day
6	Investigate how you can change the size of a shadow