

Science Knowledge Organiser

Light (Term 4)

Year 3

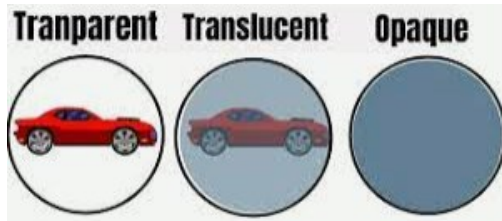
Our learning

In our science lessons this term, we will be learning about light. This is part of the **physics** aspect of science. Through our learning we will be considering the **cause and effect** of simple scientific processes.

We will learn about natural and artificial light sources

We will learn about how shadows are formed and how they can vary in shape and size.

We will learn about sun safety.



Sun is a natural source of light. Lights and candles are artificial sources of light.

Information

Light is needed in order to see things. Dark is the absence of light.

Light may come directly from a light source (such as the sun) but can also be reflected from an object into our eyes in order to be seen.

Other light sources include light bulbs, torches and fire.

Reflectors of light include the moon, mirrors, smooth water, metals and shiny surfaces.

Shadows are formed when the light from a light source is blocked by an opaque object.

Shadows can vary in size, shape and clarity (how clear they are). For example, The closer to the light source an object is, the bigger the shadow will be. This is because the object blocks more of the light. The further away from the light source an object is, the smaller the shadow will be. This is because the object blocks less of the light.

Some materials are opaque, but others are transparent or translucent.

Light that comes from the sun can be dangerous and you should always protect your eyes and avoid looking directly at it. The sun can also damage your skin if you do not use sun protection.

As a scientist I will...

- Independently use my ideas to ask questions about the world around me.
- Make predictions and give reasons for them.
- Gather, record and use data in different ways to answer a question.

Vocabulary

Light - A form of energy that lets us see the world around us

Light source - Something that makes light (natural or artificial)

Shadow - A dark shape made when something blocks light

Opaque - Material which cannot be seen through and does not allow light to pass through it

Transparent - Material you can see clearly through and allows light to pass through it

Translucent - Material that allows some light to pass through it, but you can't see clearly through it

Artificial - Not natural

Reflection - The return of light from a surface



People are opaque and cause shadows to form as they block the light from the sun.

