



Year 3 - Autumn 1 - Science Knowledge Organiser

What I already know...

The names of different materials:

- Wood, plastic, metal, paper, fabric, rubber

Materials have different properties such as :

- Hard, soft, flexible, smooth, rough, waterproof

Basic sun safety.

Key Vocabulary

light source	an object which gives out light
shadow	darkness caused by light being blocked.
transparent	letting most or all light through
translucent	letting some light through
opaque	not letting light pass through
reflect	light bouncing off a surface
dull	a surface which does not reflect light

What I will learn...

- There are different light sources, including the Sun.
- There are natural & artificial light sources
- The moon is not a light source
- Ways to keep safe in the sun
- Shiny materials reflect better than dull
- Shadows are formed by an absence of light
- Materials have different properties including: transparent / translucent / opaque and this affects the shadow formed.
- The names of some transparent materials
- How and why shadows change



Making a difference at The Merton

Children will work together to investigate light and shadows, making predictions and observations from what they see. They will explore light and shadow outside and recap the importance of staying safe in the sun.

Children will use their prior knowledge of material properties to discuss appropriate materials for creating sun shades on a small scale. They will test their creations using light meters and think about how this could be applied on a large scale e.g. to create a shaded area at school.

Making a difference at home

You could have a look at the different shadows in and around your home.

Have you got different light sources which create different shadows e.g. two lights in the same room.

Have a look here for some more info and activities:

<https://www.bbc.co.uk/bitesize/topics/z3nnb9q/articles/z9wm7yc>