



Halesowen C of E Primary School
Home Learning

DATE: 4th -7th May

YEAR GROUP: 3

SCIENCE FOCUS WEEK

THEME: Light- you can find lots of educational videos about light on this website

<https://www.bbc.co.uk/bitesize/topics/zbssgk7/resources/1>

DAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY
QUESTION	Where can I find light?	What happens when images are reflected?	Does light travel through all objects?	How can I make a shadow?
ACTIVITIES	<p>https://www.bbc.co.uk/programmes/p019yjp8</p> <p>Watch this video clip- introductions to light sources, it shows you a variety of light sources.</p> <p>Can you identify each one? Now sort the light sources into natural or artificial.</p> <p>Search inside or outside your home to see what light sources you can find, are there more natural or artificial sources of light?</p> <p>Create a true or false quiz for someone in your household. Draw a picture of various light sources and nonlight sources. Can they correctly identify if your pictures are a source of light?</p>	<p>Mirror Messages</p> <p>Write a message or draw a picture, look at this in a mirror. What do you notice has happened?</p> <p>Challenge someone or get someone to challenge you to correctly read and understand a message or picture only using the reflection in the mirror.</p> <p>One step further- if you have any of these things available to you at home.</p> <p>Extension:</p> <p>In order to test the reflective properties of materials, you will need to make a reflection tester. Attach a piece of white card to a torch:</p> <ol style="list-style-type: none"> Cut a hole in the centre of the card and push the torch 	<p>https://www.bbc.co.uk/bitesize/clips/z87jimp3</p> <p>Watch this video clip, it discusses using opaque and translucent objects to create a shadow puppet show.</p> <p>Opaque objects do not let light pass through.</p> <p>Translucent objects let some light pass through.</p> <p>Transparent objects let all the light pass through.</p> <p>Today's challenge is to hunt for opaque, transparent and translucent objects.</p>	<p>Shadows are created when an opaque object blocks light. The light cannot go through or around the object, so a darker patch of less light is created behind the object.</p> <p>Shadows are not reflections! Reflection is when light bounces off an object A shadow is caused by light being blocked</p> <p>Go outside if it is a sunny day and see what shadows your body creates.</p>



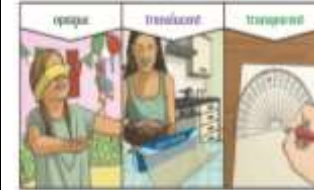
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through so that the card fits snugly around the torch without you having to hold it.

2. Shine the torch at the material you are testing.
3. If the material reflects light well, you will see the reflected light shine through the white card and light it up.

opaque	Describes objects that do not let any light pass through them.
translucent	Describes objects that let some light through, but scatter the light so we can't see through them properly.
transparent	Describes objects that let light travel through them easily, meaning that you can see through the object.



Extra challenge-

Cover your eyes with a blind fold.

Get someone to give you an object. You are only allowed to feel it but do not lift your blindfold.

Think about what other senses you could use when your eyes are covered with an opaque object.

If you take a toy, if you place a piece of paper behind it or using chalk can you draw that shadow?

If it isn't a sunny day can you use a light source like a torch to make a shadow in the house?

Investigate throughout the day the way these shadows change, do they change? Why do you think this has happened?

This can also be completed inside using a torch and object. Does the side of the shadow change if you move the distance of the torch or position of the object?

I noticed the closer an object is to the light source, the more light it blocks. This means the shadow created is bigger. But if an object is far away from the light source, it does not block out much light, so the shadow is smaller. Did you notice the same? Write your own explanation.



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(Please note Friday would have been a bank holiday in school for VE Day so there is no learning scheduled for then- please see the website later this week for some VE day activities you can do together as a family should you want to)