**Are materials see-through?**

Today we are going to be investigating whether materials are **transparent** or not. What do we mean when we say a material is **transparent**? When an object is transparent, it means that light can completely pass through it, therefore you can clearly see through it. An example of something that is transparent is a window in your house, if you look through a window and see outside of your house (a garden or even the street) then the window is **transparent**.

Why might you think it is important for some materials to be **transparent**? Share your thoughts with an adult.

In today’s investigation we are going to test some different materials to see if they are transparent or not. For this investigation I would like you to find 4 different types of materials. I have found: a plastic water jug, a glass cup, a tea towel and a cereal box. You will also need a torch.



Plastic



Cardboard

Cloth

Glass

Begin by placing your first object on a table and using the torch shine a light through the object. Does the light appear to go through the glass or does the object stop the light? Record your findings using the table below.

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| --- | --- | --- |
| Material Used | Does light pass through the object? | Is the object transparent? |
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