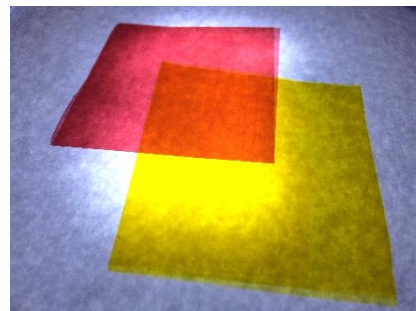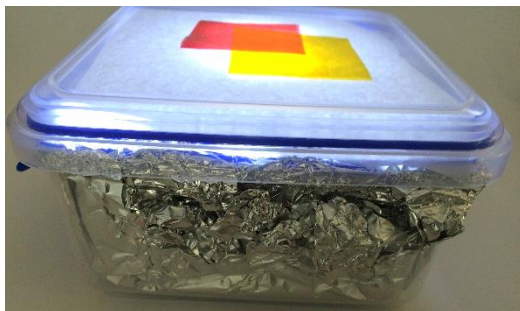# DIY Light Box

Materials

-   Clear plastic container with lid
-   Aluminium foil
-   White paper
-   Sticky tape
-   LED light (battery powered)
-   Coloured paper or cellophane and other transparent, translucent and opaque objects

Instructions

1. Line the plastic container with aluminium foil.
2. Line the underside of the lid with white paper and use sticky tape to hold it in place.
3. Place the LED light inside the container facing up.
4. Close the lid and place transparent and translucent objects on the lid.

What happens?

The aluminium foil is reflective and opaque, like a mirror. It stops light passing through the sides and the bottom of the plastic container and reflects the light inside the container. The white paper on the lid is translucent. It allows some light to pass through and it causes the light to spread out or 'disperse', giving a softer light effect compared to the LED light on its own. Children can use the light box to play with transparent, translucent and opaque objects, observing how light passes through some objects and not others, and how colours mix.