

Heading: Light Boxes

Tags/crossover topics:

All topics – dependent on what images and stories science centres would like to focus on.

Introduction:

Light boxes, or panels, are an easy way to add another dimension to tabletop learning. They provide an illuminated background on which you can use a range of translucent materials. Popular choices for light box activities include colour mixing, using transparent coloured plastic paddles; tissue paper crafts; and exploring natural materials, such as leaves and flowers, as intricate details are literally brought to light.

An approach to using light boxes that we would recommend is a tracing activity. By printing images of your choice onto acetate sheets, participants can put a piece of paper over the acetate and trace the picture. We recommend including some line drawings where possible, ranging from simple patterns all the way to detailed scientific diagrams and technical drawings, as these are more immediately traceable.

The benefit of this approach is that a range of stories can be told depending on what stories your centre would like to focus on. Examples of what you might want to draw include:

- Technical drawings of satellites;
- Earth Observation satellite images;
- Animals that are frequently tagged used trackers (e.g. tigers, whales, birds);
- Images of Earth from space;
- New satellites being launched in the near future;
- A timeline of different satellites that have been developed and launched over the years.

This approach allows you to tell stories about the launches of satellites over the years; the images that they are able to capture and why this is useful and interesting; the different applications of different types of satellite; and the future of Earth Observation.

Kit list and any templates:

[A4 rechargeable light pad](#)

- Many light boxes need to be plugged in to work. This makes them logistically more difficult to operate as part of an activity as you need to be near a power source. We recommend these rechargeable pads to avoid this issue. They are also designed to be used for (dry!) messy play if you want to use them for activities using, for example, sand or glitter.

A4 acetate sheets, e.g. [Pack of 10 A4 acetate sheets from Ryman](#)

- We recommend A4 acetate sheets which are 0.1mm thick.
- Most office printers should be able to print on acetate sheets easily. Treat the sheets as if you are printing onto thick card. You may need to use your printer's bypass tray.

Method:

A light box station can be set up much like a colouring station – all you need is:

- A table to lie the light boxes flat;
- A supply of drawings on acetate sheets;
- Paper;
- Pencils (or other medium of choice).

You may want to complement it with some interpretation or other printed information related to the drawings you have chosen. This is ideal if this is a self-led activity. If it is staffed, staff members can offer information about the images you have chosen.

Differentiation - how can this be adapted for different audiences:

This works well as a drop-in activity with limited supervision. Staff can use the drawings as a starting point for discussions and introductions to other topics and activities.

Early years:

- Very young participants can engage with it as a tracing/drawing activity.
- It can work as an unstructured activity in which participants spend as long as they like completing their drawings.

Sensory play:

- There are different brightness settings usable on the light boxes that participants can use depending on their wants and requirements for the activity.
- Activities can range from tracing to using other colourful crafts materials, such as tissue paper or plastic-free glitter.

Learning outcomes or discussion prompts:

Example discussion prompts:

- What the drawings are of
- Where the drawings are from
 - Why do you think someone drew this?
 - How do you think we got this photo?
- All the things we can see on Earth from satellites
 - Cloud cover
 - Changing forests
 - Lights from cities
- Why the images could be important or interesting

This also gives scope to link the activity to others you may be running simultaneously e.g. if the drawings are of satellites, you may link it to any other satellite activities, galleries or content you have at your centre. Perhaps there are ways to tie the drawings or conversations in with work done by local researchers; you could collaborate with your own partners to see if there are any images you might be able to utilise in a drawing activity.

Links for further info:

[TickiT Guide to Using Light Panels](#)