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Home of educational play Light Panel Guide 2014

Our Light Panel Range



A3 Light Panel Product Code: 73046



A2 Light PanelProduct Code: 73048



A2 Colour Changing Light Panel Product Code: 73018



Exploration Light Tray Product Code: 73022



Round Light Panel Product Code: 73054



Colour Changing Light Panel & Table Set Product Code: 73386



Wooden Light Table Product Code: 73038



Light Panel Covers (A3 & A2) Product Code: 72046 & 72048



A2 Light Panel & Table Set Product Code: 72271





Light panels have now become a standard piece of equipment in most early years settings and primary classrooms. They enable the delivery of high quality learning but getting the most out of them requires imagination and careful planning.

Linda Thornton spent over 40 years working in the early years and primary sectors of education as a teacher, head teacher and education adviser focusing upon the ways in which young children learn and develop. Linda has drawn much of her inspiration from first-hand experience of the Reggio Emilia approach to early childhood where light plays a central part in the learning process. In this bullet-point guide she has listed 150 uses of a light panel covering all aspects of learning from observation of natural and man-made objects, colour mixing, creativity, scientific observation, mathematical perception, language development and more to give a flavour of just what is possible.

Not only do light panels provide the basis for exciting activities in the early years and primary stages but they can be used as a resource which enhances the quality of the learning environment - they provide an opportunity to create an atmosphere where quiet calm engagement is made possible.

The ideas outlined here should be thought of more as a starting point than an endgame... used properly light panels captivate children in their warm glow, enhance the learning process and provide illumination in the wider sense.

150 ideas to use with a light panel!

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Light & Colour

 Provide a variety of resources, such as Colour Paddles, SiliShapes, counters, natural and reclaimed materials. Used on a light panel, these will provide starting points for talking to children about colours, light, transparency, translucence and opacity.

Use Colour Paddles on a light panel to help very young children identify
a range of colours. You can add to this investigation by providing sheets of
coloured acetate or tissue paper for young children to explore.

Place the SiliShapes Sensory Circles on a light panel to see what happens when different colours
are placed on top of one another or in overlapping patterns. Help the children develop their sensory
awareness by encouraging them to trace the patterns on the large and small Sensory Circles using their
fingertips.

 Use the Colour Paddles, the Splat set, coloured counters or acetate sheets to help children discover what happens when different colours are 'mixed' together.

- When they have begun to recognise what happens when particular colours are mixed together, encourage them to mix colours using paints on the clear tray on top of the light panel.
 - Use coloured acetate or tissue paper to create 'stained glass windows' with the children. Very young children will enjoy exploring the effects of these windows on a light panel.
- Provide a range of different resources for the children to sort and classify by their characteristics - transparent, translucent or opaque.
- Help older children to look carefully at the range of colours around them. Show them 'palettes of colour' on a paint chart. Encourage them to find a range of greens, reds or blues in different resources and materials to place on a light panel and observe the effects.



- A light panel is the perfect way to explore the beauty of children's paintings, especially if they have used water colours on thin paper. Choose a different child's painting to display in this way for a day each week.
- Place a variety of objects on a light panel. Use the Perception Spheres and Perception Semispheres to enable the children to magnify and change the colours of the objects they see when looking through them.





 Place the SiliShapes Linking People on a light panel and draw the children's attention to the details of the characters. Show the children how to make rubbings of the various people to cut out and use on the light panel in their play.

 Make shapes from coloured acetate, use the Sensory Circles, Splats or Rainbow Blocks or provide natural and reclaimed materials and encourage children to look at the outlines and shapes of the larger objects.

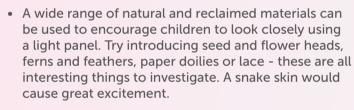
Go on to look at the detailed shapes of a range of objects. Place a variety of leaves on a light panel

 include broad leafed, complex and simple leaves, evergreen and deciduous and encourage the children to look carefully and begin to sort and classify the types of leaves. Introduce Easy Hold Colour Panels and magnifying lenses for children to compare colours and look closely at the detail of the leaves.

• Extend the children's exploration of the details found on leaves by looking at skeleton leaves on a light panel. Encourage children to look closely at the details and then introduce magnifying lenses so that they can look even more closely at the details.







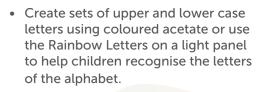
- Use the light panel to explore the details found on a variety of shells - the light source will give clarity not only to those shells which are translucent but will also encourage children to focus on opaque objects.
- Compare translucent colour shells with real shells and shell X-rays to see the connections.
- Provide good quality paper and drawing pencils for children to use on the light panel next to an object so that they can make careful close observational drawings. Providing clear acetate and fine pens for the close observational drawings will provide a further resource to use with the light panel.



- Human X-rays make fascinating viewing for young children who may have encountered them in hospital of at the doctor's suragery.
- A visit to the dentist may result in children having a personal X-ray to explore using a light panel.
 Use alongside the Giant Teeth Demonstration Model to compare the layout of teeth and the X-rays.
- Children are fascinated by fingerprints and a light panel is the perfect resource for building on this interest. Use an ink pad to take the children's fingerprints on thin paper. Put them onto the light panel and observe how they are all different using a magnifying lens. Look carefully at the arches, loops and whorls which make each fingerprint unique.







 The SiliShapes Alphabet set can be used on a light panel for letter recognition, recognising initial sounds, reading simple words and spelling CVC (consonant, vowel, consonant) words.

 Adding the SiliShapes Trace Alphabet set will help children with correct letter formation. Use with additional sets for early word building and spelling.

 Use the Rainbow Letters and a collection of suitable resources for the children to match the initial letter sound to a real object. For example, 'b' and 'button', 'c' and 'cone', 'sh' and shell.

Give each of the children a piece of clear acetate
with their name printed on it in indelible ink.
Children can use the name sheet on the light
box to help them recognise their name, to label
any pictures they have created on the light panel
or to trace over with a water-based pen as they
begin to write their names.



Letters

 Provide a clear tray with the base covered with coloured sand for children to use on the light panel to practise handwriting patterns, letter formation, writing their names and spelling words.

 Children who do not particularly enjoy writing will often happily write on clear acetate on a light panel as they enjoy using the different medium.

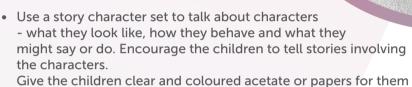
> Create handwriting patterns and letters on clear acetate for the children to trace over.

 The same idea can be used for sounds and word groups in early phonics.

Use the light panel and provide diagrams
 such as the parts the body, the parts of a plant, life cycles - for the children to label.
 Copy the diagrams onto either clear acetate or thin paper for the children to use on the light panel which will give clarity to the lines of the diagram.

Storytelling

- Make available a wide range of resources, including natural and reclaimed materials for free play and storytelling using a light panel.
- Add small world characters and props to the range of resources next to the light panel to develop the children's storytelling skills. Use sheets of coloured and clear acetate to help the children make backgrounds for their characters when they are telling stories.
- Use the SiliShapes Linking People to create stories with the children. Encourage them to invent stories of their own. Ask questions such as 'Where do you think the Linking People might live?' or 'What do you think they enjoy doing?'



to make their own superhero and fairy tale characters to use on the light panel to create stories.

• Provide mirrors to add a further dimension to small world play and storytelling on a light panel. This works well with fantasy figures and environments.

 Take photos of the stories children create and record their conversations as they develop their stories. Use these to create books for other children to enjoy.



 Use clear acetate to create story strips, using words or words and pictures, for familiar stories and rhymes. Ask the children to put the story strips into the correct sequence on the light panel.

> • Give the children clear acetate and permanent markers and ask them to develop a story, in pictures or words, which they can share with others using the light panel.





blocks to pose questions which encourage children to count and problem solve. For example, 'Can you find me three red triangles?' or 'Can you put four blue rectangles on the light panel?'

 Try using a variety of buttons on the light panel. Choose different sizes, shapes, colours and with a varying number of holes. Counting both the buttons themselves, as well as the number of holes they have, can lead children to set and solve a wide range of mathematical problems.

• Use larger quantities of counters or beads on the light panel for children to experience counting larger numbers of objects and understanding place value.

• Provide opportunities for children to use numbers and objects on the light panel so that they can experiment with a number of objects, the appropriate numeral and the written number word.

 The SiliShapes Numbers sets are perfect for use on a light panel to support number recognition, ordering numbers, counting and labelling. The Dot Numbers set can be used alongside to encourage counting the dots and matching the quantities of dots to the appropriate numbers.

• The SiliShapes Trace Numbers set will help children with developing correct number formation. Use both sets together to solve mathematical problems.

 Use the SiliShapes Linking People to encourage children to count, sort and order the characters. Talk to the children about the different attributes and relationships of the family members and pose problems for them to solve.

 Make signs - addition, subtraction, multiplication, division, equals, more than, less than - out of coloured acetate for the children to use with Rainbow Numbers or SiliShapes Numbers on the light panel. Encourage them to work in pairs, setting problems for each other to solve.

• Provide squared acetate sheets and water based pens for the children to colour various number patterns. The acetate sheets can then be wiped clean for future use. This would also work for making number staircases.





Shapes & Patterns

 Make four piece 'jigsaws' using sheets of coloured acetate for young children to explore and fit together. Older children will enjoy using the Translucent Geometric Shapes to discover the geometric properties of 3D shapes.

• Use coloured acetate to create large shapes or use the Jumbo Colour Mixing Shapes for the youngest children to identify and name different shapes using a light panel. Older children can use smaller shapes, such as Translucent Attribute Shape Set, to learn about more complex shapes and to see how they fit together or they can be used to create patterns.

Use a selection of translucent shapes to encourage children to copy existing patterns, complete a sequence or create patterns of their own.



 Create patterns, both vertical and horizontal, for children to copy by stacking the SiliShapes Soft Bricks or placing them horizontally in different formations.

> Use the SiliShapes Linking People on a light panel to create different repeating patterns. Try arranging the characters in different ways - in a horizontal line, in a circle, in a square or pyramid.

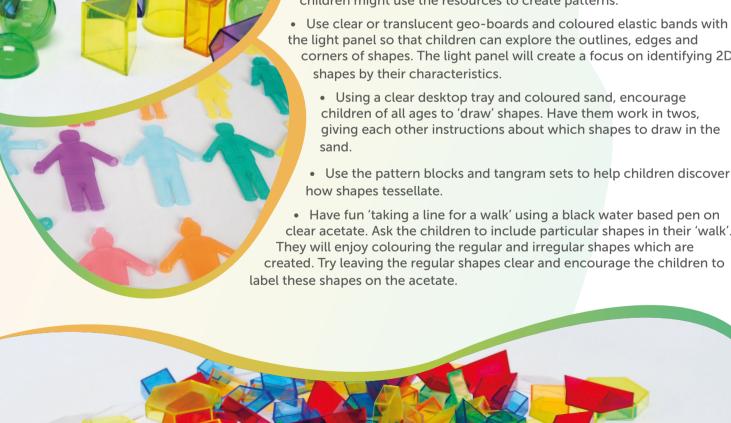
 Use reclaimed materials of different 2D and 3D shapes for the children to explore freely on the light panel. Use a variety of transparent, translucent and opaque objects. Suggest that the children might use the resources to create patterns.

the light panel so that children can explore the outlines, edges and corners of shapes. The light panel will create a focus on identifying 2D shapes by their characteristics.

 Using a clear desktop tray and coloured sand, encourage children of all ages to 'draw' shapes. Have them work in twos, giving each other instructions about which shapes to draw in the

Use the pattern blocks and tangram sets to help children discover

clear acetate. Ask the children to include particular shapes in their 'walk'. They will enjoy colouring the regular and irregular shapes which are created. Try leaving the regular shapes clear and encourage the children to



 Providing a collection of the Perception Spheres in a basket for young children to explore will encourage them to explore the world around them using their senses. They will enjoy touching and handling the balls and will see the world in different colours as they look through the spheres in turn at objects placed on a light panel.

 Explore early mark making by encouraging children to try finger painting on a clear tray on the top of the light panel. The thick paint marks and the light from below will create interesting effects.

- Place a clear tray on top of the light panel and arrange curved 'waves' of different coloured pulses and grains - orange and green lentils, pearl barley, different types of rice - and watch how the children explore line and pattern making with their fingers and hands.
- Use a clear cantilevered artist's box to display translucent, transparent and opaque objects.
 Buttons, beads, shapes, glass nuggets, stones, shells, small bottles and papers can all be provided to encourage children to develop their creativity through exploring the things of beauty on a light panel.
- Use a jewellery box to display a collection of pieces of jewellery which are no longer used next to a light panel.
 Children will find many different creative ways to explore, investigate and arrange the items of jewellery.



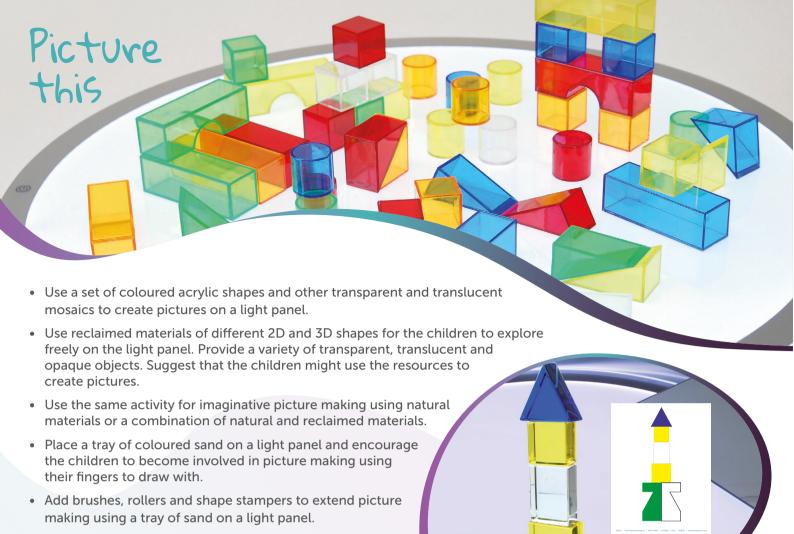
- Develop children's artistic and creative skills by encouraging them to paint with inks on thin paper on a clear tray on top of the light panel. Painting flowers or other detailed natural materials will encourage them to look closely and pay attention to detail.
- Playing with painted paper faces on a light panel will pose challenging problems for young children as they create and name real and imaginary characters.

Being Creative



- The addition of a mirror to a light panel will help develop children's creative thinking skills as they see the resources they are using from different angles.
- Collect together a wide range of bottle tops and other reclaimed plastic materials and arrange them in a reclaimed cardboard box in palettes of colour. Observe how individual children choose to use the reclaimed materials on the light panel in many different creative ways.
- Using the set of Perception Semispheres with a range of small objects on a light panel will encourage children to think creatively. The brightly coloured transparent semispheres can be placed over the objects both to change colour and to magnify them.





- Use the Colour Crystal Block Set for children to create pictures on a light panel, either following a diagram or by creating their own ideas.
- Help children create symmetrical butterfly pictures using coloured shapes and a mirror on a light panel.
- Try the activity above using a mirror with a tray of sand. Encourage the children to create other symmetrical pictures and patterns.
- Provide a wide range of colourful resources and materials for the children to use on a light panel. Show them a range of work by different artists and ask them to create a picture inspired by the great artists. Take photographs of the results to display alongside the work of the artists.
- Ask the children to work in pairs using the light panel. Place a barrier across the middle of the light panel. An adult should then describe a picture, one aspect at a time, which they want the children to create using the resources provided. When the children have finished remove the barrier and compare what the children have created. This activity can be extended to have one child describe a picture which they want a second child to create on the light panel.



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Build it!

- Position a range of small world play characters next to a light panel and suggest to the children that they use the SiliShapes Soft Bricks to build castles, houses, ships or other structures to use in their small world play.
- Use the SiliShapes Soft Bricks to encourage children to observe what happens when different colours are built up on top of one another on a light panel, talking about shades and tones of colour.
- The activity above can be extended by the addition of the Rainbow Block Set, the Sensory Blocks or the Colour Crystal Block Set to add a variety of 3D shapes to the structures the children are able to build.
- Take photographs of the structures children have built, or a selection which you have built yourself, and ask the children to re-create these buildings on the light panel, following the originals exactly.
- Place a barrier between yourself and a child working on a light panel and describe a structure you want the child to build - step by step. See how well they follow your instructions.
- Using a mirror across the centre of the light panel, ask individual children to build a symmetrical structure.
 Talk to them about what they can see and why it has happened.
- Repeat the previous activity with a pair of children working together to create the structure you are describing. Observe how well they work as a team to follow your instructions.
- Provide a variety of translucent, transparent and opaque reclaimed objects on a light panel for the children to build with - clear food containers, boxes, small bottles and reels will work well.



- Combine transparent and translucent blocks, the Colour Crystal Block Set and reclaimed materials for the children to learn how to create more complex stable structures.
- With older children use clear and coloured acetate to create the nets of 3D shapes.
 Help them to create the 3D shapes to use to build structures on a light panel.

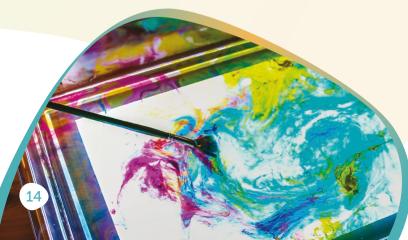


Sand & Water

- Extend the pattern making activity by asking the children to model patterns found in nature - spirals on shells, lines on leaves, spiders' webs. Show them the real things or good quality photographs.
- Encourage early mark making and picture making by providing children with 'waves' of coloured sand on a clear tray on the light panel.
- Use different colours of sand in clear trays on a light panel for children to make patterns using their fingers, hands, rollers or brushes.
- Put a clear tray with natural coloured sand in it on top of the light panel alongside shells, stones, small pieces of driftwood, small world play pirates to add a different dimension to the children's imaginary play. Help them to draw maps in the sand or create a hilly, rocky landscape.

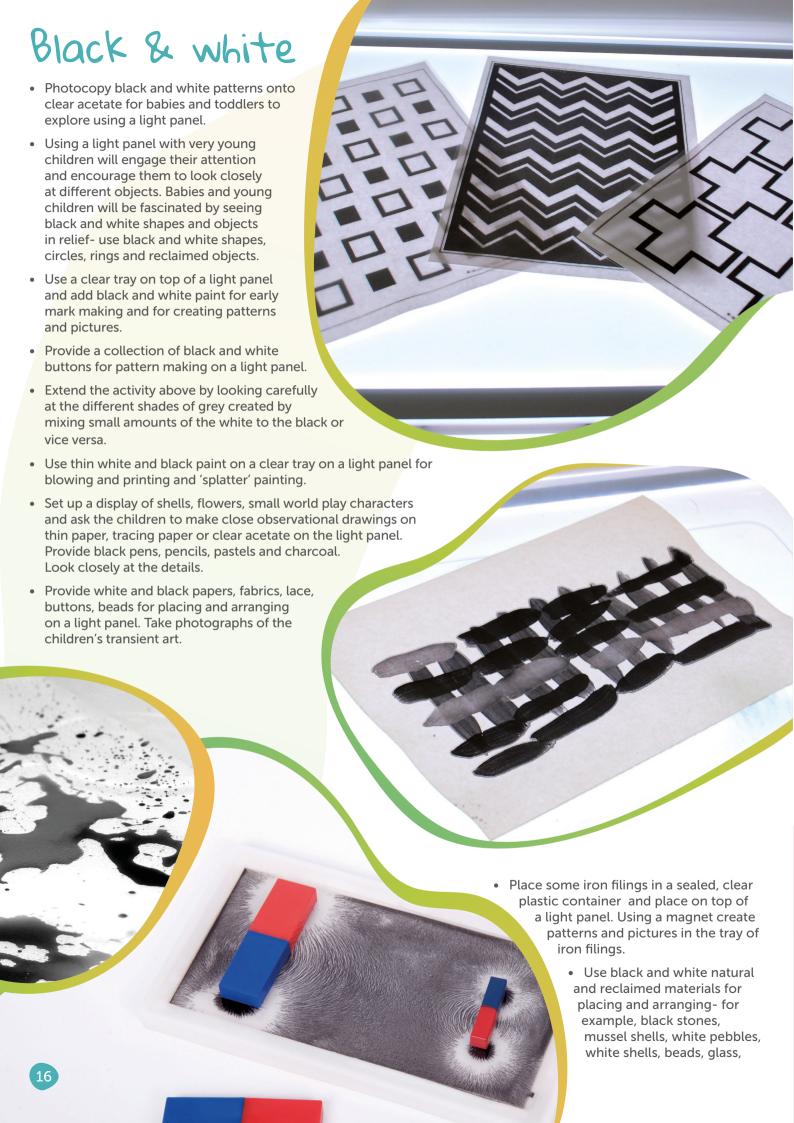


- Place the Exploration Light Tray on top of a light panel and half fill it with water. Provide model fresh water and sea creatures, small boats, large pebbles and shells for small world play.
- Have fun with mathematical investigations by placing a clear tray of water on the light panel and use tropical fish counters or sea creatures for counting, addition and subtraction investigations. The children could make fish from coloured acetate.
- Put a tray of coloured or clear bubble mixture on top of a light panel and ask the children to blow bubbles. Using the light panel means that they can look closely at the details of the bubbles.
- Use this absorbent paper to make a print of the bubbles by placing the sheet of paper gently on to the surface of the bubbles. Remove the tray and put the print of the bubbles on to the light panel and look at the result closely. Perhaps the bubble prints can be turned into pictures?
- Fill the Exploration Light Tray with water and place onto a light panel, then add a few drops of marbling inks. Look closely at the effects which will be very clear as the light shines through. Use thin absorbent paper to capture the marbling patterns.
- Make up a tray of coloured ice cubes in advance. Place a tray of water on the top of the light panel and gently put the ice cubes into the water. Watch what happens when the ice cubes melt. Take photos of the process for the children to write about later.









• Provide a range of natural materials including stones, shells, leaves and twigs to explore on a light panel.

• Encourage them to look at the details of the natural materials and to classify them into those which are translucent, transparent or opaque.

• Create a 'Naturals Box' collection for children use for placing and arranging- storytelling and imaginative picture making.

Use a light panel for children to look closely at the details
of the spirals they find in nature particularly in shells,
snail shells and fossils. Provide clear acetate for close
observational drawing of the spirals and tissue paper
for cutting out spirals to put on the light panel.

 Collect seed pods and cones and place them on a light panel so that they can be seen clearly.
 Provide photographs of the pods and cones for the children to compare with the real thing.





 When children are exploring spiders' webs draw their attention to what they look like in detail. Recreate webs on a light panel using threads or wool using stones or plastic 'jewels' as drops of dew. Encourage children to draw webs on clear acetate on the light panel and then add decoration or a spider they have created.

 Use the light panel to look at 'How green is green?' By looking at leaves of different shades of green on a light panel children will observe the different shades and tones of the colours of leaves. Provide Colour Paddles alongside for colour mixing and paint charts to compare the different shades of green.

Place a sheet of thin
 paper on the light panel
 and create prints using thin
 paper, twigs or by rolling cones covered in
 paint. Look closely at the patterns created.

 Provide a selection of flowers, insects, aconites and other naturals which have been preserved in acrylic blocks so that children can observe their details. Encourage them to make close observational drawings of what they see.

 Ask the children to draw the outlines of flowers and other natural materials onto clear acetate. Place the drawings onto an overhead projector and project the images onto large sheets of paper, fabric or clear plastic for the children to trace over and colour to make large scale banners.







Full range available at www.tickit.co.uk/www.tickit.eu



Gem Cubes Product Code: 73548, 73550, 73586



SplatsProduct Code: 72397



Rainbow Glitter Shapes



Rainbow Letters & Numbers
Product Code: 72433, 72431



Sensory Glitter Storm Set Product Code: 92104



SiliShapes® Sensory Circles
Product Code: 54517



Translucent Colour Bugs
Product Code: 73199



Perception Semispheres
Product Code: 72602



Colour Crystal Block Set Product Code: 72606



SiliShapes® Linking People Product Code: 54513



Rainbow Blocks
Product Code: 73275



Easy Hold Colour Panels
Product Code: 73359





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