

# Light Box Activity Guide

## Level 1





# **Light Box Activity Guide Level I**

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## **Introduction**

The APH Light Box was designed at the request of teachers familiar with the needs of developmentally young children with limited vision. A number of programs serving young visually impaired children have constructed devices similar to the Light Box and have found them useful in teaching basic visual skills as well as more complex visual-motor and visual-perceptual skills. The aim in developing the APH Light Box was to create a safe, portable version of these teacher-made devices, equipped with a rheostat and prop to increase versatility.

Thirteen items have been developed for the Light Box and included in a Level I Kit for use with children functioning from birth to four years. The accompanying written activities provide practice in the performance of basic visual skills, eye-hand coordination tasks, and beginning matching and discrimination exercises.

The Light Box and Level I Materials were not designed to provide a comprehensive program of vision training activities; they should be used in conjunction with other materials. The Light Box Materials can, however, play a very useful role in vision training. The high contrast background afforded by the Light Box's illuminated surface makes a variety of visual tasks easier to perform. In addition, the brightly colored items used on the Light Box are attractive, and the novelty of the materials motivates students to utilize their vision.

## **Acknowledgments**

A number of people participated in the development and evaluation of the APH Light Box and the accompanying Level I Materials.

Tom Poppe, a member of the Design and Development staff at APH, designed and built the Light Box and constructed the various items to be used with it.

Kay Ferrell, Preschool Consultant for the American Foundation for the Blind, served as the project's primary consultant. Ruth Holmes, coordinator and educator of low vision students at the Illinois School for the Visually Impaired served as consultant for the organization and content of the guidebook's written activities.

The following evaluated the Light Box Materials with students during formative and field tests:

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Blind, Colorado Springs, Colorado

Jeanna Wilson, Teacher, Dallas Services for Visually  
Impaired Children, Dallas, Texas



## **Kit Items**

### Acetate Backgrounds

- 1 red
- 1 blue
- 1 yellow
- 1 green
- 2 clear

### Blackout Backgrounds

- 1 with 8 1/2" x 11" opening
- 1 with 4" x 4" opening

### Tracing Backgrounds

- 1 with thick wavy line
- 1 with thin zig-zag line

### Pattern Backgrounds

- 2 striped
- 1 checkerboard
- 1 figured

### Template Backgrounds

- 1 circle
- 1 triangle
- 1 square
- 1 circle and triangle
- 1 circle and square
- 1 triangle and square
- 1 triangle, square, and circle
- 1 twelve small circles

## Plexiglas® Blocks

- 12 small circles in six colors
- 3 small squares in red, blue, and yellow
- 3 large squares in red, blue, and yellow
- 3 small triangles in red, blue, and yellow
- 3 large triangles in red, blue, and yellow
- 6 large circles – two each in red, blue, and yellow

## Opaque Shapes

- 4 large circles
- 4 large squares
- 4 large triangles

## Plexiglas® Spinner

- 1 spinner
- 1 set pinwheel patterns
- 1 set polka dot patterns

## Plexiglas® Face Puzzle

## Plexiglas® Ball Puzzles

- 1 frame
- 1 two-piece puzzle
- 1 four-piece puzzle

## Threading Beads

large colored beads

1 rope

## Colored Transparent Tumblers

2 red

2 blue

2 yellow

2 green

## 8 Suction Cup Knobs

## **Safety**

1. No child should use the Light Box unless he is directly supervised by a teacher or other adult familiar with the following safety instructions and Guidelines and Suggestions section of the Activity Guide.
2. Check the Light Box before each use for any damage to the unit, such as exposed electrical components, frayed cord, or any other potential hazard.
3. The Light Box will not operate if it is cold (below 50° F). Allow time for the unit to reach room temperature if it has been stored several hours at 50° F or below.
4. Operate only on 120 V AC, 60 cycle electrical outlets.
5. The consumer should not defeat the three-prong, grounded supply line.
6. Do not operate without a tube in the sockets.
7. Check to see that the Plexiglas work surface is securely in place whenever the Light Box is in use. Do not remove the work surface unless the unit is disconnected.
8. Do not cover or obstruct the Light Box's vents, or permit the child to stick fingers or objects of any kind in them. (See diagram, page 18).
9. Do not allow the child to play with the electrical cord, plug, or hinged prop.

10. Do not permit the child to drop, hit, stand, or sit on the Light Box or engage in any other activity which might damage the unit or expose electrical components.
11. Keep the Light Box away from liquid or moisture. When using acetate sheets for marking on, withdraw the sheet from the Light Box to clean. If it is necessary to clean the Light Box, disconnect it and wipe with a damp, not wet, cloth.
12. Do not operate the Light Box continuously for more than 8 hours. This will prevent excessive heat buildup within the unit.
13. The Light Box will get moderately warm during normal operation. However, if it becomes quite hot to the touch, disconnect the unit. Before using the Light Box again, have it checked by technical personnel.

**NOTE TO THE CONSUMER:**

The Light Box is  approved.

## Guidelines and Suggestions

In November 2002, government regulations concerning electronic components forced a change in the ballast/dimmer system used in the APH Light Box.

Please be advised that the new system will produce a single flash of light when the unit is switched on. To avoid startling the student or exposing a light-sensitive student, we suggest covering the Light Box before switching it on or turn the unit on before positioning the student nearby.

1. When using the Light Box, place it in a darkened corner of the room, positioned so that other children will not come in contact with it or its electrical cord.
2. Examine the Light Box for flickering to guard against seizing in a seizure-prone child. The Light Box may flicker on low intensities, particularly when new. This should decrease after the first few weeks of use. If feasible, leave the Light Box on for several hours each day the first week you use it to help “age” the lamp/dimmer system.
3. If a child is seizure-prone, be cautious about presenting items or displays on the Light Box which move in a rhythmic, patterned manner.



4. If a child is sensitive or averse to light, it may be helpful to introduce the Light Box with overhead lights on. Set the dimmer at a medium intensity, and/or decrease the size of the illuminated area by using one of the “blackout” backgrounds. Placing one of the colored acetate sheets or a pattern on the Light Box may also reduce the intensity of the light. Experiment to find the conditions which maximize the child’s visual functioning.
5. For the child with sufficient vision who is reinforced by light or the novelty of the Light Box, try working with overhead illumination and set the Light Box at a medium or low intensity. As the child performs an activity on the Light Box, reinforce his appropriate responses by turning up the intensity of the Light Box for a few seconds; then return the intensity to a lower setting to be ready to reward the next correct response.
6. Use the Light Box in a variety of positions (horizontal, vertical, angled) and place the child in a comfortable posture (sitting at a table or on the floor, lying on her side, resting over a wedge or bolster). Check with the child’s physical therapist to find which positions are best for her. Note which postures enhance her visual functioning.
7. Present the Light Box at varying distances and areas in relation to the child’s body and watch him to see whether he demonstrates a preference.
8. When presenting items on the Light Box, put them in different places on the work surface. Note whether the child responds consistently and accurately to the items

regardless of their location, or, instead, shows signs of a field defect. For example, if the child tilts her head to one side, appears to be using only one eye, or reaches for objects on one side only, there may be a field loss or the child may have difficulty crossing the midline. This will affect the manner in which you present activities.

9. Use the colored acetate sheets and objects and observe whether the child prefers one color over another.
10. If the child has difficulty manipulating items on the Light Box because of their tendency to slip, use masking tape to attach a large square of clear contact paper, with its adhesive side up, to the Light Box surface. At first, the contact paper may be too sticky, but with a little use it will provide a nonslip surface.
11. If the child has difficulty picking up the Plexiglas puzzle pieces and shapes, attach the suction cup knobs provided with the kit to these items.
12. Use words like “look,” “see,” and “find” when presenting items on the Light Box work surface. Encourage the child and describe for him what he is seeing – its shape, size, position, and color.
13. Show enthusiasm for each activity you perform with the child, and use strategies that are particularly motivating to her. Show the child a new activity, then ask her to perform it. Provide verbal and physical prompts when necessary.

14. Praise the child's appropriate responses. It is important to immediately reinforce correct responses with things the child finds motivating – a hug, verbal praise, applause, etc.
15. If the child engages in a disruptive behavior while working with the Light Box, try dimming or turning the Light Box off as a means of discouraging off-task behavior.
16. If the child engages in self-stimulation activities when using the Light Box, such as light gazing or flicking, turn the Light Box off for several seconds. When the child has stopped self-stimulating, turn the Light Box back on and resume the activity. If he begins to self-stimulate again, repeat the procedure. If self-stimulation continues after several trials, end the session; note the stimulus conditions which cause the child to self-stimulate. At the next session, avoid these stimuli as much as possible. Try reducing the intensity of the Light Box and/or the amount of illuminated surface area. Turn on the room lights or use the colored acetate sheets as backgrounds for the activities. Continue to turn the Light Box off when the child self-stimulates, reintroducing it when he stops.

If the child continues to self-stimulate without improvement after several sessions of following this procedure, discontinue use of the Light Box for several days. When you reintroduce it, you may attempt to eliminate self-stimulation in some other way. For example, try rewarding the child after periods of time in which he does not self stimulate, gradually increasing the length of time you require him not to self-stimulate. Work

with the child using other vision stimulation and training materials; it may be that the Light Box is not an appropriate tool for him at this point. Brightly colored or reflective objects, fluorescent materials, a penlight with color caps, and other items may elicit more appropriate visual responses from some children.

17. As the child develops new skills, continue to practice and build upon skills learned earlier.
18. To transfer a skill learned on the Light Box to a normally lit environment, increase room illumination as you gradually decrease the intensity of the Light Box. As you decrease Light Box intensity, some of the Plexiglas materials will begin to appear dark and without color. Exchange them for other highly contrasting brightly colored toys.
19. Light Box activities should be used as a part of a total program of visual development. (See Suggested Readings.) The written activities accompanying the Light Box are not intended to provide a comprehensive program of vision stimulation and training activities.

## **The Child with Cortical Visual Impairment:**

### **Considerations for performing Activities with the Light Box**

The child diagnosed with Cortical Visual Impairment may not respond to the activities suggested for the Light Box in the same manner as a child whose vision loss is due to ocular abnormalities. The child whose vision loss is due to damage to the visual cortex and/or posterior visual pathways is said to have Cortical Visual Impairment (CVI) (Groenveld, Jan & Leader, 1990). Damage may be caused by cerebral hypoxia; other causes include cytoplasmosis, toxoplasmosis, meningitis, trauma, and conditions causing cerebral degeneration. (Merrill & Kewman, 1986).

The agent causing CVI may cause additional differences in the functioning of the child's brain and nervous system. It has been observed that many children with CVI are easily overstimulated, a difficulty which may be associated with an inability of the nervous system to selectively attend to important stimuli and screen out irrelevant stimuli in the environment. The child is flooded with many types of stimuli without a sufficient means to sort out and disregard the excess. Overstimulation, it has been theorized, may trigger the child's withdrawal, which serves as a protective response, shielding him from further overstimulation and the resulting stress. (Groenveld, Jan & Leader, 1990; Morse, 1990). *For this reason, intense visual displays, or other intense stimuli, should be avoided,* as a child with CVI may experience discomfort and withdraw, even if he initially shows signs of visual attention.

The literature suggest the following considerations may apply in performing activities on the Light Box with a child who has CVI.

- *Intense visual displays and overstimulation of any kind should be avoided.*
- *Be very cautious about presenting any visual display with movements, shifting patterns, or flickering light. These may trigger a seizure in some children; consult the child's physician before introducing these (Groenveld, Jan & Leader, 1990).*
- The child's cues should be carefully attended to, noting when he is ready for vision stimulation, and stopping when he shows signs of overstimulation or tiredness (Morse, 1990).
- Observation may give you some awareness of the length of time it takes for a particular child to process sensory information; use this awareness to time your presentation of materials and assist the child in organizing his responses (Morse, 1990).
- Surrounding distractions should be reduced (Morse, 1990). (The Light Box itself may be of some help in this regard since it is most often used in a darkened environment, reducing visual input from the rest of the environment.)
- Positioning the child so he is comfortable and secure means he will not need to divert energy to maintain his posture; this may be critical to his visual performance. (Groenveld, Jan & Leader, 1990).

- Taking care to introduce novel items gradually (Morse, 1990), and ritualizing the manner in which tasks are presented, using language to cue the child, and clearly marking the beginning and end of tasks may lessen the chances of overstimulating him (Groenveld, Jan & Leader, 1990).
- Visual displays should be simple in form and items should be presented separately or with adequate space between them, since children with CVI seem to have special difficulty discriminating between foreground and background information (Groenveld, Jan & Leader, 1990).
- Some children with CVI are sensitive to bright light; others require more light (Groenveld, Jan & Leader, 1990). The Light Box should be introduced at low illumination until you are able to determine the level that is comfortable for the child. It may be that the Light Box is not an appropriate tool for some children.
- Observe the child for field losses, which may be associated with CVI; modify his posture and your presentation of visual displays and tasks to accommodate such losses (Groenveld, Jan & Leader, 1990).
- Color may help the child with CVI perceive forms. Color perception is usually normal in a child with CVI, however, he may respond better to bright colors than to pastels, and yellows and reds may be easiest to see (Merrill & Kewman, 1986; Powell, 1996).

- It has been suggested that more severely affected children may relate better to common objects than to toys. (Groenveld, Jan & Leader, 1990). Common objects, both opaque and colored transparent ones, may be used on the Light Box to test this preference.



## References

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## Maintenance

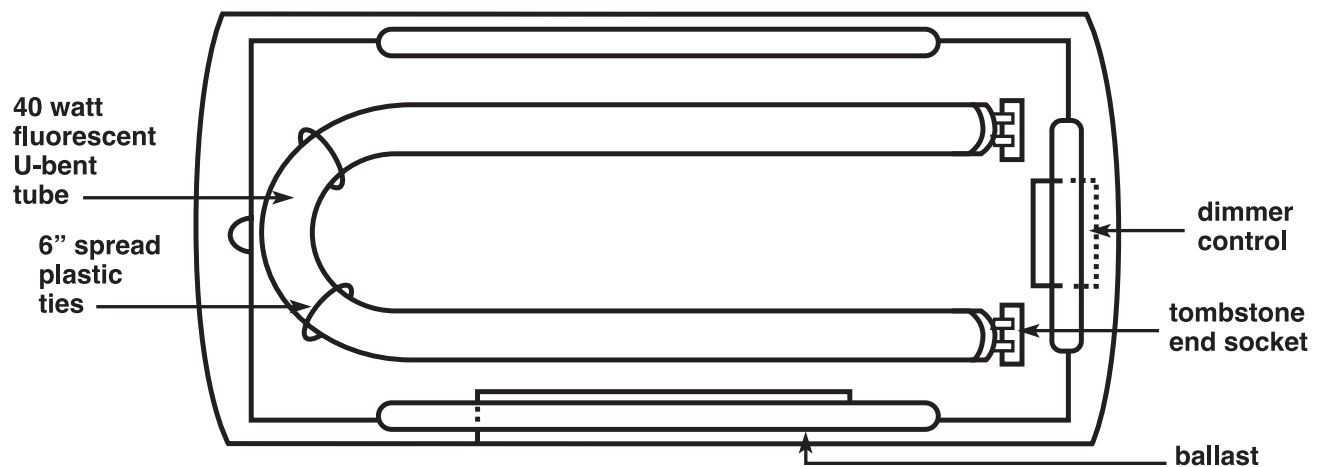
Replacement parts for the Light Box are available at the American Printing House for the Blind, where it should be returned if it is damaged or develops a malfunction. Repairs to the Light Box must be made in accordance with standards set forth by Underwriters Laboratories. Technicians at the American Printing House for the Blind are trained to perform such repairs.

A worn-out bulb, however, may be replaced by the user. Replacement bulbs can be purchased from electrical supply companies for under \$20.00. General Electric manufactures the 40 watt fluorescent U-bent tube used in the Light Box (mod-u-line, F40 SP30 U 6). Phillips manufactures a similar bulb. The average life of this particular fluorescent tube is 12,000 hours, however, turning the Light Box off and on reduces its life expectancy. In addition, the bulb gradually loses full brightness over a period of time. Watch for this gradual dimming and replace the bulb early.

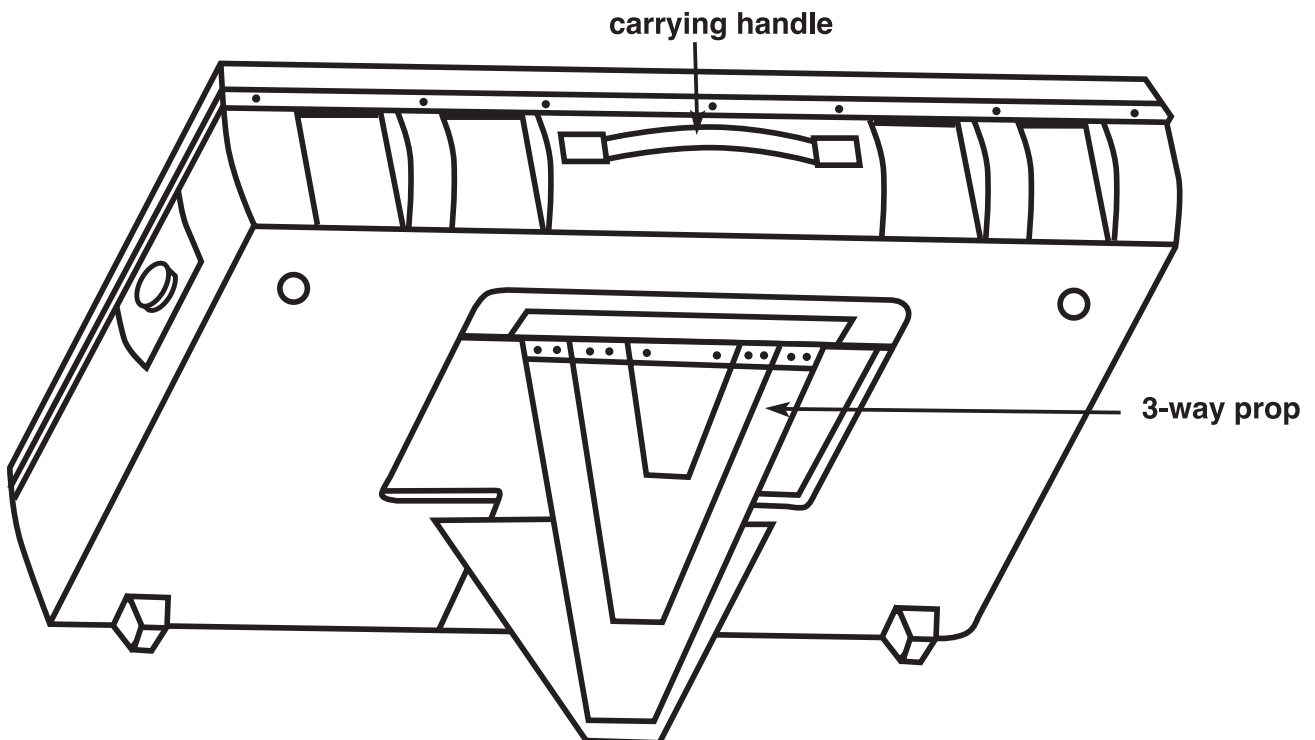
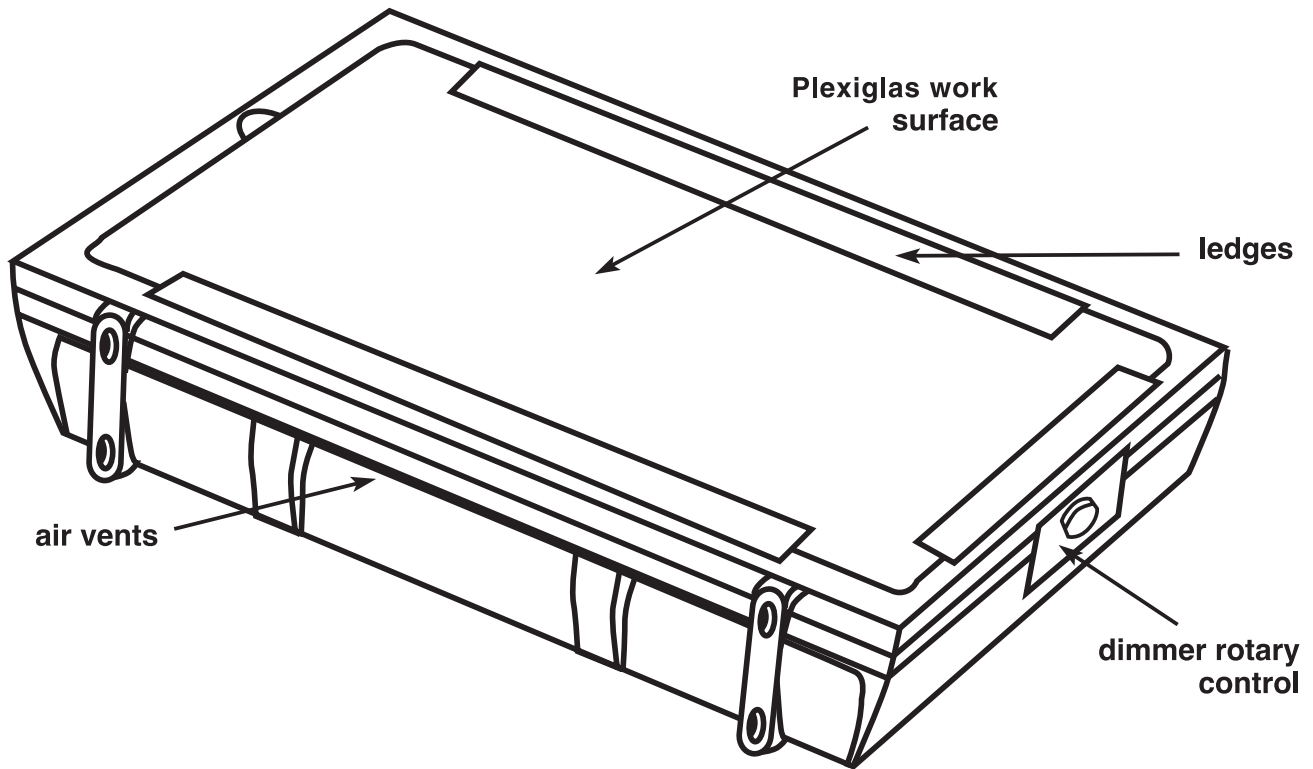
To replace the bulb, UNPLUG THE LIGHT BOX before removing the Plexiglas work surface. Remove the Plexiglas by pushing your finger or a penknife under the Plexiglas at the small molded depression on the left edge of the box. Slide it off the box. Four plastic ties hold the bulb in place. They can be released and should not be cut. Release each tie by pressing down on the molded tab. Pull up on the bulb; the pins connecting the tube to the sockets should release easily. Remove the old bulb and position the new bulb with the pins over the two slots in the sockets. Press the pins down into the slots as the rest of the bulb is lowered in place.

The pins will make a snapping sound as they lock in place. It is important to secure the new bulb, reusing all four plastic ties. Extra ties may also be purchased from an electrical supply company for a few cents apiece.

## APH Light Box



# APH Light Box



## **Additional Materials**

A number of readily available commercial items can be used on the Light Box for activities involving shape, color, and size discrimination, drawing, and prewriting tasks. Cut and paste or draw colored shapes, patterns, and pictures on a variety of background media. Create cards or board games to teach matching. Duplicate worksheets shown in the Activity Sheets booklet, or provide the child with the materials to create original artwork—drawings, or collages.

Acetate Sheets (clear and transparent colored sheets in a variety of sizes; available from art and school supply stores, and Dick Blick catalog)

Photocopier Acetate (specially treated clear 8-1/2 x 11 inch acetate sheets may be used in some photocopiers in place of paper, producing acetate copies of paper original; available from office supply stores, Dick Blick catalog)

Art Film (brightly colored transparent film has an adhesive backing, sold in sheets and as rolls of tape of various widths; may be cut to any shape; available from art supply stores, Dick Blick catalog)

“MonoKote” (brightly colored transparent film adheres to any surface when heated with iron; sold in rolls, may be cut to any shape; available from hobby stores which sell model-building materials)

Onionskin or Tracing Paper

Colored Cellophane

Colored Tissue Paper

Colored and Patterned Wrapping Paper

Colored and Patterned Fabric

Colored Projection Markers (water soluble or permanent ink markers; adheres to acetate; available from school supply stores and Dick Blick catalog)

Colored Grease Pencils

“Cel Vinyl” (acrylic paint; highly opaque black paint adheres to acetate; apply with a brush; available from art supply stores and Dick Blick catalog)

Fingerpaints (use in clear or translucent white plastic tray or Tupperware® container)

Crayons (use with onionskin or tracing paper)

Black Electrical Tape

Colored Ribbon

Colored Yarn

Rickrack

Doilies

Colored Plastic Buttons

Plexiglas Sample Squares (available from companies that retail Plexiglas)

For drawing the child's attention to shape and for tracing around and copying shapes, these items may be incorporated into activities with the Light Box:

Coasters

Cookie cutters

Jello molds

Stencils

Wooden blocks

Parquetry pieces

Puzzle pieces

A-Z and 1-10 Panels (available from Exceptional Teaching Aids catalog)

Shape puzzles of soft rubber made by Lauri Toys (available in toy stores)

Clay or Playdough®

Posterboard shapes

Familiar objects with simple contours (a cookie, banana, bar of soap, shoe, or spoon)

Ink and acetate (draw your own solid or outline shapes on acetate)

Other materials which may be used with the Light Box to develop a number of skills are:

Wikki Stix® (colored wax wicking to be bent and pressed into a variety of shapes or construction; available from Exceptional Teaching Aids catalog)

Colored transparent plastic eating utensils, glasses, and plates

Colored plastic “stained glass” ornaments made from simple kit available from hobby shops)

Brightly colored translucent or transparent plastic toys (Easter eggs, pop-beads, other inexpensive toys)

Balloons

Colored pinwheels

Small toy cars

Halloween masks

Plastic Halloween pumpkins

Colored plastic clothespins



Costume jewelry beads (available from hobby shops)

Mosaic tiles (bag of 150 1/2-inch transparent plastic squares in 16 colors; available from Dick Blick catalog)

Marbles

Colored bath oil beads

Colored transparent “gummy” candies

Lifesavers® and other colored transparent hard candies and suckers

Confetti made of colored acetate closed in a clear plastic bottle

The following items from the American Printing House for the Blind catalog may be used on the Light Box for discriminating and matching shapes, tracing, and introducing part-whole relationships:

Puzzle Form Board Kit (contains three each of circles, squares, triangles, rectangles, and diamonds; some of the shapes are divided into two and three pieces, which must be assembled correctly to form the shape; catalog No. 1-03721-00)

Shape Board (board itself is not suited for use on Light Box, but shapes are useful; contains five shapes, including one large, one small and three medium-sized pieces: catalog No. 1-03710-00)

## Additional Materials



## **Addresses**

American Printing House for the Blind  
1839 Frankfort Avenue  
P.O. Box 6085  
Louisville, KY 40206-0085  
Phone: 800-223-1839  
Fax: 502-899-2274  
Website: [www.aph.org](http://www.aph.org)

Childcraft Education Corporation  
P.O. Box 3239  
Lancaster, PA 17604  
Phone: 800-631-5652  
Toll-free Fax: 888-532-4453  
Website: [www.childcraft.com](http://www.childcraft.com)

Dick Blick Art Materials  
P.O. Box 1267  
Galesburg, IL 61401-1267  
Phone: 800-723-2787  
Fax: 800-621-8293  
Website: [www.dickblick.com](http://www.dickblick.com)

Exceptional Teaching Aids, Inc.  
20102 Woodbine Avenue  
Castro Valley, CA 94546  
Phone: 800-549-6999  
Fax: 510-582-5911  
Website: [www.exceptionalteaching.com](http://www.exceptionalteaching.com)

## Suggested Reading

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## **Goal: Baseline**

### **Activity 1**

Place the child in front of the Light Box, turn it on and note whether he blinks, flinches, quiets or suddenly becomes active. These may be indications that he is aware of the light.

### **Activity 2**

In a darkened room, place the Light Box upright a few feet to one side of the child. Note whether she turns her head toward the Box. If she does not respond, tap the Light Box to draw her attention to it. Try placing the Light Box in different positions around the child and at varying distances from her. Encourage her to visually locate the Box.

### **Activity 3**

When the child orients to the Light Box in different positions, place the Light Box at a little distance from him and have him move toward it. Try different colored and patterned backgrounds.

### **Activity 4: Acetate Backgrounds**

Place the colored backgrounds on the Light Box. Note whether the child shows greater awareness of or attends longer to a particular color. If you discover a color preference, use that background color when introducing

### **Goal: Baseline (continued)**

other activities, such as reaching for an opaque Light Box object, tracking an opaque object pulled across the Light Box surface, and drawing or tracing with a black marker.

### **Activity 5: Plexiglas Blocks**

Scatter or arrange the blocks across the Light Box surface to create an interesting pattern for the child to view.

### **Activity 6: Plexiglas Blocks**

Place several of the blocks on the Light Box. Working hand over hand, show the child how to pick them up, or tell him to pick up the blocks he sees. Withdraw your assistance as soon as possible. Note whether the child has apparent difficulty seeing particular shapes or colors, or misses blocks placed in certain areas of the work surface (e.g., the upper left corner). If the child is unable to pick up the blocks, use the suction cup pegs as knobs.

### **Activity 7: Spinner**

Use the spinner patterns provided or draw a variety of patterns on the spinner using colored projection markers or grease pencils. Try coloring both the moving wheel and the

stationary underside, or draw the pattern on pieces of clear acetate. Place one of the pieces below the spinner and one on top of it. Spin the wheel to draw the child's attention.

### **Activity 8: Spinner**

Make a rattle by putting large colored transparent beads, the threading beads, or confetti of colored acetate in a transparent plastic bottle. Tilt the rattle back and forth so the beads roll from one end to the other. Note whether the child's eyes follow the movement of the beads

### **Activity 9: Spinner**

Have the child look through the end of the bottle at the colored beads and reflections cast on the inside of the rattle. Quietly roll beads back and forth; note whether the child blinks as beads roll against her end of the rattle.



## **Goal: Awareness of Light**

### **Activity I**

Place the child in front of the Light Box, turn it on and note whether he blinks, flinches, quiets or suddenly becomes active. These may be indications that he is aware of the light.

### **Activity 2: Acetate Backgrounds**

Place the colored backgrounds on the Light Box. Note whether the child shows greater awareness of or attends longer to a particular color. If you discover a color preference, use that background color later, when introducing other Light Box activities, such as reaching for an opaque object, tracking an opaque object pulled across the Light Box surface, and drawing or tracing with a black marker.

### **Activity 3: Pattern Backgrounds**

Place a patterned background on the Light Box and slide another pattern back and forth over it to create a moving display of patterned light for the child. (Colored or black and white vertical stripes or a checkerboard pattern moved over another checkerboard pattern create interesting visual effects.) **Be cautious about presenting visual displays which move in a rhythmic manner. They may induce seizures in a seizure-prone child.**

## Goal: Awareness of Light (continued)

### **Activity 4: Pattern Backgrounds**

Additional patterned backgrounds may be made from a variety of things fabric, wrapping paper, colored acetate scraps, ribbon, and tape. (For more ideas, see Additional Materials.) Place the backgrounds on the Light Box and note whether the child seems more aware of or attends longer to particular types of patterns.

### **Activity 5: Face Puzzle**

For a young infant or low functioning child, set the face puzzle on the Light Box as a pattern for the child to attend to.

### **Activity 6: Spinner**

Draw a variety of patterns on the spinner using colored projection markers or grease pencils. Try coloring both the moving wheel and the stationary underside or draw the pattern on pieces of clear acetate. Place one of the pieces below the spinner and one on top of it. Find a position that is comfortable for the child and adjust the Light Box accordingly. The spinner has suction cup feet and will adhere to the Light Box. Turn the spinner with your hand over the child's hand to draw her attention to it. Encourage her to visually attend to the spinner as she manipulates it independently. **Be cautious about presenting patterns which move in a rhythmic manner. They may induce seizures in a seizure-prone child.**



## **Activity 7**

If the child does not indicate any awareness of the light, does not display change in his behavior or level of activity, pair the light with a stimulus to which the child does respond and which is pleasurable for him. The stimulus may involve one or more of his senses, such as a vibrator which stimulates his sense of touch and hearing. It may be necessary to search for a stimulus to which the child will respond – a taste, an odor, a particular sound or type of music. Present the stimulus to the child and turn on the Light Box. Keep the Light Box on as long as the child attends. Practice the pairing often and work in short sessions. (From Audrey J. Smith and Karen Shane Cote, *Look At Me: A Resource Manual for the Development of Residual Vision in Multiply Impaired Children*. Philadelphia: Pennsylvania College of Optometry Press, 1982, 87–90.)

## **Activity 8**

Later, occasionally present the favorite stimulus without the Light Box. Or, present the Light Box or other light without the favorite stimulus. Practice intermittent pairing of the favorite stimulus and the light many times, working in short sessions. Gradually decrease the percentage of time you pair the stimulus and light until you are presenting the light alone. Your goal is that the child will develop an awareness of light through repeated association with the favorite stimulus. (ibid., 90–92).

**Goal: Awareness of Light (continued)**

**Activity 9**

Experiment with a variety of light sources to develop the child's awareness: penlight, flashlight (with or without colored caps or cellophane), Tensor Lamp, flicker light (available through Spencer Gifts and other novelty stores), Christmas tree lights, "light organ" or "disco light" (available from Radio Shack®). **Be cautious about presenting lights which move in a rhythmic patterned manner. They may induce seizures in a seizure-prone child.**

## **Goal: Localization of Light**

### **Activity 1**

In a darkened room, place the Light Box upright a few feet to one side of the child. Note whether he turns his head toward the Light Box. If he does not respond, tap the Light Box to draw his attention to it. Try placing the Light Box in different positions around the child and at varying distances from him. Encourage him to visually locate the Light Box.

### **Activity 2**

If the child has difficulty visually locating the Light Box, attach bells or another sound-making object to the Box. Jingle the bells to help the child localize the Box. Prompt the child to reach for and ring the bells (ibid., 123–124).

### **Activity 3: Acetate Backgrounds**

Experiment with different intensities and colors of light using the acetate backgrounds. Note whether the child has less difficulty localizing light of a particular intensity or color.

### **Activity 4: Blackout Backgrounds**

Decrease the lighted surface area of the Light Box using the blackout backgrounds. Create your own blackout backgrounds to black out all but a very small circle of light (1/2-2 inches in diameter). Note whether the child is able to visually locate these small lighted areas.

## Goal: Localization of Light (continued)

### **Activity 5**

Use other light sources and practice localization with the child. Try a penlight, flashlight, Tensor Lamp, flicker light (available through Spencer Gifts® and other novelty stores).

**Be cautious about presenting lights which move in a rhythmic, patterned manner. They may induce seizures in a seizure-prone child.**

## Goal: Tracking Light

### Activity 1

Practice tracking light using other types of lights: a flicker light (available through Spencer Gifts), penlight, or flashlight (with or without colored caps or cellophane). At first, the child's eye movements may be choppy. Blink the light slowly along a horizontal line, blinking, waiting for the child's eyes to catch up, then blinking it again. If necessary, move the child's head to help him track the light. Do not however, force him to cross his midline. Work instead, on one side. To further help him track, place his hand on the penlight as you move it. Perform the activity requiring the child to track along a vertical line, oblique line, then in a circular fashion.

Gradually increase the rate at which you blink the light until the child is tracking along a line of unblinking light (ibid., 97-98). **Be cautious about presenting lights which blink or move in a rhythmic manner. They may induce seizures in a seizure-prone child.**

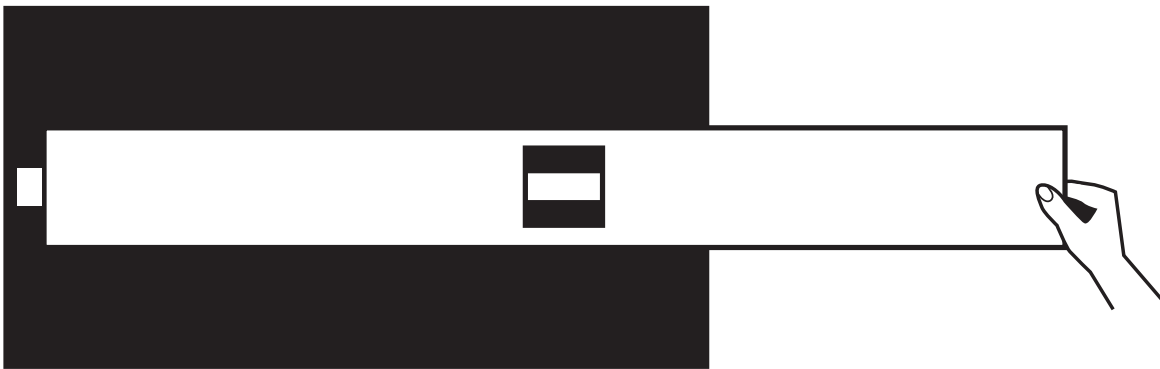
### Activity 2

Use a penlight, flashlight, or other light. Have the child track the light horizontally. Again, have the child hold the penlight as you move her hand and/or guide her head to help her track the light. When she is able to track the light across her visual field, have her track the light vertically, obliquely, and in a circle. Continue to be cautious about forcing the child to track past her midline.

## Goal: Tracking Light (continued)

### **Activity 3: Tracing Backgrounds**

Cut a hole in a long strip of cardboard four inches wide and pull it across the Light Box in a horizontal or vertical line. Encourage the child to visually track the moving light this creates.



### **Activity 4: Acetate Backgrounds**

Place the yellow background on the Light Box surface and slide the blue background slowly back and forth over it to create two moving surfaces of green and yellow. The same activity may be performed with other color combinations. Have the child visually track the moving edge. If she does not track, move her head with your hand. Allow the child to move the acetate sheets. **Be cautious about presenting displays which move in a rhythmic, patterned manner. These may induce seizures in a seizure-prone child.**

## **Goal: Awareness and Localization of Objects**

### **Activity 1**

Once the child displays attention to light and the ability to localize it, you may begin to teach the concept of an object as a blockage of light. Turn on the Light Box; draw the child's attention to it. Then totally block the light by placing an opaque cover over the Box—a carpet sample, the Light Box cover, piece of cardboard. Have the child touch the material. As you perform the activity, verbalize about it. Repeat the activity, requiring the child to increase the length of time he attends. Gradually decrease the size of the object blocking the Light Box. Be creative in the materials you use—a giant cookie, favorite stuffed toy, a cup, small candies or cereal. Allow the child to touch and explore the objects. Experiment with the level of illumination as well, noting with which sizes and at which intensities the child functions. (If a child has a constricted visual field, it may be easier for him to locate small objects.) (ibid., 106–111).

### **Activity 2**

An object may also reflect light. Present a variety of reflective objects— an unbreakable mirror, shiny L'Eggs® container, silver Mylar® balloon, tinsel, reflective plastic sheeting in a variety of colors (available from Dick Blick, see address p. 25). Also introduce fluorescent items, such as those contained in the APH Let's See Kit (Catalog Numbers: 1-08141-00 and 1-08151-00). Draw the child's attention to

## **Goal: Awareness and Localization of Objects (continued)**

them by shining a light on them in a darkened room or by using black light with the fluorescent items. Gradually increase the illumination of the room, and require the child to attend for longer periods of time.

### **Activity 3: Plexiglas Blocks/Threading Beads/Tumblers**

Introduce brightly colored translucent and transparent objects to the child, as well. In many cases, these may look like colored light rather than objects. Used on the Light Box, they are bright, contrasting, and attractive to most children. For this reason, many colored transparent objects are included in the Level I Kit and are used for a wide variety of tasks. Present one of the items to the child and draw her attention to it.

### **Activity 4: Tumblers**

Place one or more tumblers on the Light Box as an interesting visual display. Drop the threading beads or other small items into the tumblers to draw the child's attention to them.

### **Activity 5: Plexiglas Blocks**

Spin the small and large circles like a coin to draw the child's attention.



## **Activity 6**

Place the threading beads or other small beads in a large, plastic, transparent bottle; close the bottle and let the child use it as a rattle when working on the Light Box. If the beads themselves do not make enough noise to attract the child's attention, place rice, a few beans, or a jingle bell inside the bottle.

## **Activity 7**

Place the rattle you have made, various kit items, or objects from the environment in different places on the Light Box. Have the child locate and reach for them. (To help the child localize, use the blackout backgrounds to cut down on the amount of illuminated surface area.)

## **Activity 8: Plexiglas Blocks**

Scatter or arrange some of the blocks across the Light Box surface to create an interesting pattern for the child to view.



## **Goal: Tracking Objects**

### **Activity 1**

Tape a small toy or a circle of black cardboard to the end of a clear plastic straw or dowel. Move the object slowly across the surface of the Light Box for the child to follow visually. When she is able to track the object horizontally, have her follow it vertically. Later, move the object in diagonal and circular patterns and encourage tracking. Apply this sequence of teaching tracking as you use other materials on the Light Box. Try using circles and other shapes of different sizes and materials—such as colored acetate.

### **Activity 2: Threading Beads**

Tie one of the dark threading beads to the end of a piece of white yarn. Pull the bead across the Light Box and have the child visually track it. If he does not attend or track, use your hand to guide his head movements, and/or allow him to pull the string. Practice the task, decreasing the assistance you give him.

### **Activity 3: Threading Beads**

Roll and slide the threading beads across the Light Box surface to gain the child's attention and encourage visual tracking.

## **Goal: Tracking Objects (continued)**

### **Activity 4: Spinner**

Make a large black dot on the spinner using a grease pencil or piece of poster board. Slowly spin the wheel, encouraging the child to track the moving dot.

### **Activity 5**

Make a rattle using a transparent plastic bottle and colorful transparent beads. Help the child tilt the rattle so the beads roll from one end to the other. Encourage her to visually follow the movement of the beads.

### **Activity 6**

Roll the rattle on the Light Box surface. Encourage the child to roll and manipulate the rattle over the Light Box while visually tracking it.

### **Activity 7: Tracing Backgrounds**

Move a small toy car or other object along the path of a tracing background. Have the child visually follow it. Allow him to play with the car.

### **Activity 8: Tracing Backgrounds**

Slide the background with the thick wavy line on the Light Box. If you wish, use colored acetate sheets behind the background. Have the child trace the lighted line with his

finger as he visually attends to his hand movements. If the task is too difficult for him, cut simpler backgrounds from a piece of black poster board—such as a straight horizontal or vertical line. Trace the line with your hand over his.

### **Activity 9: Tracing Backgrounds**

When the child is able to trace simpler lines, cut more complex tracing backgrounds from black posterboard or heavy black paper. Curve the lines, make them thinner, include more corners and irregular or asymmetric patterns.

### **Activity 10: Tracing Backgrounds**

When the child is able to trace a line with the tactual assistance provided by edges of the line, slip a sheet of clear acetate over the background. Have the child trace the line with her finger. (She should be unable to feel the edges of the line.)

### **Activity 11: Acetate Backgrounds**

Draw two straight, heavy, black parallel lines on a sheet of acetate. Leave an inch or more of space between the lines. Slip the acetate on the Light Box and have the child draw a line with his finger between the two lines you have made. As the child becomes more skillful, move the two lines closer together or curve them.

**Goal: Tracking Objects (continued)**

## **Activity 12**

Cut stencils for the child to trace around with her finger.

## **Goal: Eye-Hand Coordination**

### **Activity 1**

Make a rattle by putting colored beads or other items inside a transparent plastic bottle. (See Additional Materials for ideas.) Place the rattle on the Light Box and seat the child in front of it. If necessary, direct his gaze, toward the rattle and shake it. Encourage him to locate and reach out for the rattle as you put it in different places on the Light Box.

### **Activity 2:Tumblers**

Place two or more tumblers on the Light Box and indicate to the child that you are dropping a treat (raisin, cereal bit) in the tumblers. Have her retrieve the treats.

### **Activity 3:Threading Beads and Tumblers**

Use the threading beads with the tumblers or any other container for a variety of in and out activities on the Light Box. Use other small objects for these activities as well.

### **Activity 4:Tumblers**

Have the child nest and stack the tumblers.

### **Activity 5: Plexiglas Blocks**

Have the child stack Plexiglas blocks on top of each other.

## **Goal: Eye-Hand Coordination (continued)**

### **Activity 6: Plexiglas Blocks and Tumblers**

Have the child place a large circle over the top of a tumbler, then stack a second tumbler on top of the circle. Continue adding large circles, squares, and tumblers to make a tall tower.

### **Activity 7: Threading Beads**

Working on the Light Box surface, have the child pull the threading beads off the string and thread them on again. If necessary, place your hand over the child's hand and help him thread the beads back on the string.

### **Activity 8: Plexiglas Blocks**

Scatter blocks across the Light Box, give the child a small toy, and tell her to put the toy on a block, then hop the toy to another block, and so on.

### **Activity 9: Plexiglas Blocks**

Make a stepping stone path with the blocks across the surface of the Light Box. Have the child walk his fingers or hop a small toy from block to block.

### **Activity 10: Plexiglas Blocks**

Spin the small Plexiglas circles as you would spin a coin on the Light Box surface. Have the child catch the spinning circles.



### **Activity 11: Plexiglas Blocks/Threading Beads**

Slide or roll the Plexiglas blocks or threading beads. Encourage the child to reach out, catch the item and roll or slide it back to you.

### **Activity 12: Threading Beads**

Place a large Plexiglas block, tumbler or other item on the Light Box as a target. Have the child roll threading beads or slide Plexiglas blocks at the target.

### **Activity 13: Tracing Backgrounds**

Have the child guide a small toy car or other objects along the paths of tracing backgrounds of varying degrees of difficulty.

### **Activity 14: Tracing Backgrounds**

Use a simple tracing background, form background, or stencil. Have the child fill in all the spaces through which light shines with Playdough.

### **Activity 15: Tracing Backgrounds**

Place one of the tracing backgrounds on the Light Box and slip the clear acetate sheet over it. Have the child draw a line following the curve of the tracing background.

**Goal: Eye-Hand Coordination (continued)**

**Activity 16: Tracing Backgrounds**

When the child is able to trace simple lines, cut more complex backgrounds from black posterboard or heavy black paper.

**Activity 17**

Have the child trace around her hand with her finger, grease pencil, or marker.

## **Goal: Object Permanence**

### **Activity 1: Plexiglas Blocks**

Have the child put the blocks and other objects in and remove them from a variety of containers (tumblers, plastic beach pails, shoe boxes).

### **Activity 2: Threading Beads**

Tie a threading bead to a piece of yarn or on the end of its own string. Hide the bead under a cloth or cover of some type. Encourage the child to pull on the string to reveal the bead. Repeat the task several times. Then remove the string and see if the child is able to locate the bead.

### **Activity 3: Threading Beads and Tumblers**

Show the child a blue threading bead, then place the yellow tumbler over it. Ask the child to find the bead. When he is able to perform successfully with the transparent tumbler, use one of the darker tumblers or an opaque container through which the bead cannot be seen, and repeat the task. Other small objects and food treats may be used. Cover the object with a light or heavy cloth, a shoe box, etc.



## **Goal: Shape Discrimination**

### **Activity 1: Plexiglas Blocks/Opaque Shapes**

Place an object which is familiar to the child (favorite toy, shoe, spoon) on the Light Box. Have the child trace around it with her finger; draw her attention to its shape. Let her look at a variety of objects and their shapes on the Light Box and their uses. Help the child identify objects by naming them and demonstrating their uses.

### **Activity 2: Plexiglas Blocks/Opaque Shapes**

Spread out some of the opaque shapes or Plexiglas blocks on the Light Box. If the child can identify the block's shape (circle, square, or triangle) he may "keep" it. If you perform the activity with more than one child, play to see who can identify the most shapes.

### **Activity 3: Plexiglas Blocks/Opaque Shapes**

Place two shapes on the Light Box and cover them with a heavy cloth or piece of cardboard. Ask the child to guess which one is the square (or triangle or circle). Expose the one she selects and ask her if she was right.

### **Activity 4: Plexiglas Blocks/Opaque Shapes**

Place the blocks or opaque shapes in a container or bag. As you pull and place them on the Light Box, have the child identify each one.

## **Goal: Shape Discrimination (continued)**

### **Activity 5: Plexiglas Blocks/Template Backgrounds**

Let the child explore the Plexiglas blocks and template backgrounds. Have him trace around the edges of the shapes; name each shape for him and guide his fingers around its distinguishing features.

### **Activity 6: Plexiglas Blocks/Template Backgrounds**

Slide the template for the circle onto the Light Box and place one of the large Plexiglas circles above the opening. Help the child place the circle inside the frame. When she is able to do this independently, repeat the task using the templates for the triangle and the square and the corresponding Plexiglas blocks. (If the child has difficulty manipulating the pieces, attach the suction cup pegs and use as knobs.)

### **Activity 7: Plexiglas Blocks/Template Backgrounds**

When the child has mastered the previous activity (Activity 6), place the template with both circle and triangle on the Light Box. Place the Plexiglas circle and triangle above the openings. If necessary, help the child tactually explore the blocks and put them in the correct frames. Later, encourage him to complete the task visually. Point out the differences between the circle and the triangle. When the child correctly

### **Goal: Shape Discrimination (continued)**

places the circle and triangle within the template, introduce the one which has a circle and a square, and finally, the one with a triangle and a square. After the child masters this level, introduce the template with all three shapes.

### **Activity 8: Plexiglas Blocks**

To introduce the child to sorting and matching according to shape, begin with familiar objects which have distinctly different shapes (crayon, cookie, spoon, cup). For example, place two crayons and one cookie on the Light Box. Have the child show you which ones are the same. If necessary, demonstrate the activity. The Plexiglas blocks should also be used for this task. Use two identical blocks (e.g., two large blue circles) and a third block of the same color and size, but different in shape (large blue triangle). Have the child show you which blocks are the same.





## **Goal: Color Discrimination**

### **Activity 1: Plexiglas Blocks**

Spread the small circles on the Light Box and help the child name the various colors as she manipulates each circle.

### **Activity 2: Acetate Sheets, Tumblers and Threading Shapes**

Name the colors of these and other kit items as the child uses them.

### **Activity 3: Plexiglas Blocks**

Play color-naming games with the blocks. For example, have the child take each of the blocks from a bag and place it on the Light Box, naming each color as he pulls it out, or have him hide all of the blocks which are a particular color.

### **Activity 4: Plexiglas Blocks**

Scatter blocks across the Light Box, give the child a small toy, and tell her to put the toy on a yellow block, then hop the toy to a purple block, and so on.

### **Activity 5: Plexiglas Blocks**

Place two blocks of one color and two blocks of another color on the Light Box. Have the child pick up all the blocks of one color and then pick up the other blocks yourself.

### **Goal: Color Discrimination (continued)**

Name and point to the colors each of you takes. Repeat the game using different colors. Later, add to the number of colors from which the child must choose. When he is able to perform the task easily, have a race to see which of you can find your pieces more quickly.

### **Activity 6: Plexiglas Blocks and Tumblers**

Use the tumblers for sorting the Plexiglas shapes by color. Have the child place all blue pieces in the blue tumbler, yellow in yellow tumbler, etc.

### **Activity 7: Plexiglas Blocks**

Place two blocks of the same color and one block of another color on the Light Box. (At first, use three blocks which are all the same shape and size to avoid confusing the child.) Ask the child to show you the ones that are the same color. If necessary, work hand over hand with the child to show her what you would like her to do. Repeat the task using blocks of another color. Note whether the child has more difficulty discriminating between some colors than others.

## **Goal: Size Discrimination**

### **Activity 1**

Have the child view and explore a variety of familiar objects (favorite toy, ball, crayon, shoe, cup, cracker) on the Light Box surface and point out the difference in size. Help the child begin to understand the concepts of larger and smaller (“big” and “little”).

### **Activity 2: Plexiglas Blocks**

Let the child view and manipulate the large and small plexiglas circles on the Light Box. Indicate which circles are large and which are small. Place two large circles and one small circle of the same color on the Light Box. Have the child point out which circles are the same. Explain to him that the other is not the same size; it is smaller. Repeat the task using two small circles and one large circle. Use other shapes.

### **Activity 3: Plexiglas Blocks**

Play a variety of games which require the child to identify the big and little blocks. For example, scatter large and small blocks on the Light Box. Have the child hide all the little blocks in a container. Have her stack all the big blocks.

### **Activity 4: Plexiglas Blocks**

Have the child make a “train” by putting blocks side by side in a row. Help him do this, then suggest making a train using just the big blocks or the little blocks.



## **Goal: Matching and Sorting**

### **Activity 1: Plexiglas Blocks**

Perform a variety of “match to sample” exercises when the child has had experience discriminating which of three items are “the same.” To teach the child to match items on the basis of shape, for example, place a large circle at the top of the Light Box. Place other Plexiglas blocks of the same size and color below the circle (large blue square, triangle, circle). Have the child identify all the blocks which are the same shape as the sample at the top of the Light Box. To make the task more difficult, include large shapes of other colors. Have her sort these based on their shape rather than their color.

### **Activity 2: Plexiglas Blocks**

Using the “match to sample” technique described in activity number one, have the child match Plexiglas blocks to a sample on the basis of color. For example, place a small red circle at the top of the Light Box. Scatter several other small circles of different colors below it and have him select those which are identical to the sample.

### **Activity 3: Plexiglas Blocks**

Have the child sort Plexiglas blocks on the basis of size using the “match to sample” technique.

## **Goal: Matching and Sorting (continued)**

### **Activity 4**

Have the child sort familiar objects using the “match to sample” technique. Try using crayons, buttons, cookies, spoons, clothespins, bottle caps, a toothbrush, small comb, bar of soap, M&M’s®, and small toys.

### **Activity 5: Plexiglas Blocks**

Increase the number of samples to which the child must locate matches. For example, place a large circle and a large square at the top of the Light Box. Scatter all large circles and squares below them and have the child group the blocks according to their shapes. To make the task more difficult, include small shapes. Have her sort these based on shape, disregarding size.

### **Activity 6: Plexiglas Blocks**

Perform Activity 5 using color as the basis for sorting.

### **Activity 7: Plexiglas Blocks**

Perform Activity 5 using size as the basis for sorting.

### **Activity 8: Plexiglas Blocks**

Give the child two groups of Plexiglas blocks. For example, use all of the large circles and squares. Ask him to put the ones that are the same “together.” Do not provide a sample

### **Goal: Matching and Sorting (continued)**

for him to match. If he sorts the blocks on the basis of color, encourage him to find another way to group them until he discovers he can group them by shape.

### **Activity 9: Plexiglas Blocks**

Perform Activity 8 using color as the basis for sorting.

### **Activity 10: Plexiglas Blocks**

Perform Activity 8 using size as the basis for sorting.

### **Activity 11**

Have the child match and sort a variety of familiar objects.

### **Activity 12: Plexiglas Blocks**

If the child can sort the blocks using one criterion, try having her sort blocks using two criteria simultaneously. For example, place the large blue and yellow circles and squares on the Light Box. Have the child group them on the basis of color first, then according to their shape. Finally, have her group them on the basis of color and shape, placing all large yellow circles in one group, all large blue circles in a second group, all large yellow squares in a third group, and all large blue squares in a fourth group. This is a difficult task. If the child is confused by it, practice simpler matching activities using a variety of materials.

## **Goal: Matching and Sorting (continued)**

### **Activity 13: Plexiglas Blocks**

Repeat the above task using other criteria. For example, have the child sort large and small triangles and circles on the basis of shape and size. His groupings should be: (1) all small circles, (2) all large circles, (3) all small triangles, and (4) all large triangles.

### **Activity 14: Threading Beads**

Have the child sort the threading beads by color. Ask her to thread all the blue beads, then yellow, and so on.

### **Activity 15: Threading Beads**

Put two threading beads of the same shape but different colors on the Light Box. Have the child string two or more beads in the same left-to-right color sequence.

### **Activity 16: Plexiglas Blocks**

Perform Activity 15 using Plexiglas blocks. Have the child match the simple sequence you have set up.



## **Goal: Visual Memory**

### **Activity 1**

Have the child view a familiar object, such as a crayon, on the Light Box surface. Remove or cover the item after a few seconds and place a different item on the Light Box. Ask the child whether the new item is the same as or different from the first one. Vary the task by using different objects and increasing the amount of time between their presentation.

### **Activity 2: Tumblers/Plexiglas Blocks**

Perform previous activity (Activity 1) using tumblers or Plexiglas blocks. Have the child determine whether the two items you present are the same color.

### **Activity 3: Acetate Backgrounds**

Show the child a colored acetate background; remove it and show him a second background. Have the child tell you if it is the same as or different from the first colored background.

### **Activity 4: Plexiglas Blocks**

Place a Plexiglas block on the Light Box for a few moments. Remove the block and replace it with a second block of the same color but different shape. Have the child tell you whether the second shape is the same as the first.



## **Goal: Part/Whole Relationship**

### **Activity 1: Face Puzzle/Ball Puzzle**

Place the assembled puzzle on the Light Box. (You may wish to use the background with 8 1/2" x 11" opening to black out the illuminated area around the puzzle.) Help the child explore the puzzle. With your hand over the child's, remove puzzle pieces one at a time; then replace the pieces in the puzzle frame.

### **Activity 2: Face Puzzle/Ball Puzzle**

Once the child has become familiar with the puzzle, set it up on the Light Box with one of the pieces missing. Have the child point to the area which has no piece, tracing its outline with his finger. Show him the missing piece and let him insert it.

### **Activity 3: Ball Puzzle**

Place the puzzle on the Light Box surface with all but one piece in place. Put the missing piece below the puzzle and have the child insert it correctly. Withdraw your assistance as soon as she learns to do this independently. Leave out two pieces, then three, and then four. As the child masters each level, increase the complexity of the task by changing the orientation of the puzzle.

## **Goal: Part/Whole Relationships (continued)**

### **Activity 4: Face Puzzle**

Set up the face puzzle on the Light Box with one of the two pieces missing. Have the child identify the missing part by pointing at his own face or your face, or by verbalizing.

### **Activity 5: Face Puzzle/Ball Puzzle**

Give the child the pieces for the face puzzle and an extra piece from the ball puzzle. Have him complete the face puzzle and set aside the piece which does not belong.

### **Activity 6: Ball Puzzle**

Place the pieces for one of the ball puzzles on the Light Box without the blue frame. Have the child put the puzzle together correctly.

## **Appendix:**

### **Vision Development Materials from APH & Related Visual Tasks Chart**

<div data-bbox="105 121 521 409" style="border: 1px solid black; padding: 10px; text-align: center;"> <b>VISUAL TASKS</b> </div>	<b>Let's See: Vision Development Activities</b>	<b>Light Box Materials, Level I</b>  <b>(Use with Light Box)</b>
<b>Light awareness</b>	Light up wand / Flashlight	Colored acetate / pattern and blackout backgrounds / spinner / suggested activities
<b>Light fixation and focus</b>	Same as above	Same as above
<b>Light tracking (horizontal, vertical, and circular) and scanning</b>	Light up Wand / Flashlight with Moon Ball	Colored acetate / Spinner / Suggested activities
<b>Object awareness</b>	Bell Bracelet / Squeaker Ball / Foam Shapes / Gel Balls	Acrylic shapes / Threading beads / Tumblers / Suggested activities
<b>Object fixation and focus</b>	Same as above / Bunji Ball / Duck Puppet / Socks with Balls / Pom-poms / Moon Ball / Puppet	Same as above

<b>Light Box Materials, Level II</b>  <b>(Use with Light Box)</b>	<b>Light Box Materials, Level III</b>  <b>(Use with Light Box)</b>	<b>Program to Develop Efficiency in Visual Functioning</b>
		Section A (1-3 months)
		Same as above
		Section A (1-3 months)  Section B (4-12 months)
		Section A (1-3 months)
		Same as above

<b>VISUAL TASKS</b>	<b>Let's See: Vision Development Activities</b>	<b>Light Box Materials, Level I</b>  <b>(Use with Light Box)</b>
<b>Object tracking and scanning</b>	Puppet / Pom-pom / Squeaker Ball / Socks with Balls / Bunji Ball / Whistle Stick	Acrylic shapes / Threading beads / Tumblers / Suggested activities
<b>Eye-hand coordination (reaching and manipulation)</b>	Moon Ball / Quilt / Foam Shapes / Gel Balls / Pail / Squeaker Ball / Puppet / Pegboard / Snap-lock Beads / Whistle Stick / Slinky	Tracing backgrounds / Acrylic shapes / Threading beads / Tumblers / Spinner
<b>Matching / concrete level (color, shape, size)</b>	Foam Shapes / Rubber Balls / Blocks / Form Board / Pegboard	Templates / Acrylic shapes / Threading beads / Tumblers / Puzzle pieces / Suggested activities
<b>Simple spatial relationships</b>	Same as above / Pail / Gel Balls	Same as above



<b>Light Box Materials, Level II</b>  <b>(Use with Light Box)</b>	<b>Light Box Materials, Level III</b>  <b>(Use with Light Box)</b>	<b>Program to Develop Efficiency in Visual Functioning</b>
		Section B (4-12 months)
Pegs and pegboard / Cubes and template		Section B (4-12 months)  Section C (1-3 years)
Pegs / Cubes / Sticks / Parquetry Pieces		Section C (1-3 years)  Section D (2-4 years)
Same as above / Sticks		Section C (1-3 years)

<div data-bbox="105 109 521 394"> <b>VISUAL TASKS</b> </div>	<b>Let's See: Vision Development Activities</b>	<b>Light Box Materials, Level I</b>  <b>(Use with Light Box)</b>
<b>Matching / concrete level (detail)</b>	Shape Deck / Foam Shapes / Form Boards / Snap-lock Beads / Pegboard	Suggested activities
<b>Visual identification / concrete level (name, color, shape, size, object)</b>	Foam Shapes / Shape Deck / Form Board / Quilt	Most kit materials
<b>Simple part / whole relationships / concrete level</b>	Pegboard / Blocks / Snap-lock Beads / Foam Shapes / Form Board / Shape Deck	Ball puzzles / Face puzzles
<b>Matching / pictures (shapes, familiar objects)</b>	Shape Deck / Teacher made pictures using paper, poster boards, crayons, etc.	

<b>Light Box Materials, Level II</b>  <b>(Use with Light Box)</b>	<b>Light Box Materials, Level III</b>  <b>(Use with Light Box)</b>	<b>Program to Develop Efficiency in Visual Functioning</b>
		Section C (1-3 years)  Section D (2-4 years)
Pegs / Cubes / Sticks / Parquetry Pieces		Section C (1-3 years)  Section D (2-4 years)
Pegs and Pegboard / Cubes and template / Parquetry pieces / Sticks		Section C (1-3 years)  Section D (2-4 years)
Colored shape cards / Outline shape cards / Familiar object pictures / Stencils / Pattern guides / Activity sheets / Suggested activities	Picture cards used in game formats: card or board game, Lotto, Bingo / Activity sheets	Section D (2-4 years)

<b>VISUAL TASKS</b>	<b>Let's See: Vision Development Activities</b>	<b>Light Box Materials, Level I</b>  <b>(Use with Light Box)</b>
<b>Matching / pictures (detail)</b>	Shape Deck / Teacher made pictures using paper, poster boards, crayons, etc.	
<b>Visual identification / pictures (shapes, objects, detail)</b>	Shape deck / Snap-lock Beads / Pegboard	
<b>Part/whole relationships / more complex concrete and pictures</b>	Blocks / Pegboard / Snap-lock Beads / Foam Shapes / Quilt with hidden object underneath / Teacher-made pictures using paper	
<b>Prewriting, tracing, copying shapes, outlines</b>	Paper / Crayons / Tracing foam shapes / Tracing form board with inserts	

<b>Light Box Materials, Level II</b>  <b>(Use with Light Box)</b>	<b>Light Box Materials, Level III</b>  <b>(Use with Light Box)</b>	<b>Program to Develop Efficiency in Visual Functioning</b>
Activity Sheets	Picture cards with differing detail used in game formats	Section D (2-4 years)
Colored shape cards / Outline shape cards / Familiar object pictures / Activity sheets	Picture cards with differing detail used in game formats	Section D (2-4 years)  Section E (3-5 years)
Pegs and pegboard / Cubes and templates / Parquetry pieces	Picture puzzles	Section D (2-4 years)  Section E (3-4 years)
Activity Sheets	Activity sheets	Section D (2-4 years)  Section E (3-4 years)

<div data-bbox="107 107 521 394" style="border: 1px solid black; padding: 10px; text-align: center;"> <b>VISUAL TASKS</b> </div>	<b>Let's See: Vision Development Activities</b>	<b>Light Box Materials, Level I</b>  <b>(Use with Light Box)</b>
<b>Figure-ground differentiation</b>	Any object on quilt	
<b>Visual closure</b>	Any object protruding from under quilt	
<b>Matching / figures (abstract figures, letters, numbers)</b>	Symbols by tracer drawn on paper	
<b>Visual identification / figures (abstract figures, letters, numbers)</b>	Same as above	
<b>Writing letters, numbers</b>	Crayons and paper from kit	

<b>Light Box Materials, Level II</b>  <b>(Use with Light Box)</b>	<b>Light Box Materials, Level III</b>  <b>(Use with Light Box)</b>	<b>Program to Develop Efficiency in Visual Functioning</b>
	Large picture scenes and matching individual picture cards / Activity sheets	Section E (3-4 years)
	Picture cards / Activity sheets	Section E (3-5 years)
	Letter and Number cards used in game formats: card game, board game, lotto, bingo / Activity sheets	Section F (4-5 years)  Section G (5-6 years)
	Same as above	Section G (5-6 years)
	Activity sheets	Section G (5-6 years)  Section H (6-7 years)









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