

**CREATING EDUCATIONAL TOYS AND  
ACTIVITIES FOR CHILDREN WHO ARE BLIND  
OR VISUALLY IMPAIRED**

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## **INTRODUCTION**

Concept development and sensory awareness begin in infancy and continue to develop throughout a child's life. They are intertwined in every part of one's life, whether as a preschooler learning left from right, as a child learning Braille, or as a teenager learning to use cardinal directions. When these skills are continuously reinforced in all aspects of a child's life, and throughout daily routines, the child will ultimately gain greater independence.

In our fast-paced society, it is tempting to search for the perfect toy which will teach children, while overlooking the many opportunities and tools which exist within our own homes and communities. The benefits of using household items and daily routines are many.

We need to provide activities and opportunities which are rich, varied, and which help to develop concepts and life skills. It is easy to begin to search for the ideal toy, flashy and bright, which will teach these skills. And certainly, these types of toys do have a place in a child's play. However, we need to question which type of activity the child will learn more from: an electronic toy which has only hard plastic textures, with sounds which are not meaningful except within the context of that toy, or household objects which the child will experience throughout daily activities.

For example, an electronic toy can teach a child to sort shapes, with sounds which correspond to a picture of an animal on each shape. These pictures or plastic shapes of animals are likely meaningless to a blind or visually impaired child, and thus the sounds may be meaningless too. Over-reliance on toys to develop concepts may lead to the risk of developing empty vocabulary and over-simplified concepts. In contrast, the child could use a cutlery tray and cutlery to sort; the sounds will be familiar, the shapes are more interesting and give more auditory feedback, the child can match as well as sort, count, and create sets (sequencing and pre-math.) The child may easily transfer this shape sorting to a functional task of setting the table. This activity could also involve a daily routine of washing and drying dishes, and setting the table. Differences in size and shape of utensils may also be discussed. The activity of sorting shapes thus becomes a life skill as well.

Use of household objects is more likely to be appropriate and respectful of a child's culture and circumstances. Some cultures continue to live a simple lifestyle, with an absence of modern technology. Families with lower incomes may feel pressure to spend money on the latest and greatest electronic toy if we inadvertently give them the impression that this is what their child needs. Sometimes the very fact that we, as professionals, are using a particular toy conveys a message that this is the best item to use. We need to be aware of the values and resources of each family. Use of their own household items and routines makes this easy and effective.

Families are now living extremely complicated lives, filled with many demands on their time and resources. Teaching through the use of daily routines allows learning opportunities to occur on a consistent and frequent basis. Transfer of skills from play situations to life skills will also occur more smoothly. And finally, using homemade materials is cost effective and environmentally friendly.

Professionals and parents of children who are blind or visually impaired continually seek new opportunities to teach and reinforce concepts and sensory skills to children. This document is intended to provide parents and professionals with hands-on activities and resources to enhance the development of concepts and sensory skills by using tools that are easily available. Toys and activities that will be described are homemade using inexpensive and accessible items. The advantages of using real objects (as opposed to toy representations) are many, as are the advantages of teaching through daily routines and opportunities.

We have drawn heavily on the approaches of Maria Montessori and Lilli Nielsen in the process of collecting the activities contained in this book.

This collection is merely a beginning: we have included a sampling of ideas which we believe to be most useful. There are an unlimited number of activities to be found or created. We have chosen a binder format so that you can easily add new activities to this collection.

Be creative, be imaginative, be safe and have fun!

## **THE MONTESSORI APPROACH**

The Montessori approach to early childhood education makes use of items which promote life skills as well as skills in all developmental areas. Montessori activities are “hands on” tasks which provide a solid grounding for later abstractions. Because of the strong foundation laid, these more complex tasks are more fully understood and are not carried out as mere rote operations. Materials developed within the Montessori approach are simple, and often made of natural materials which are rich in sensory features.

The underlying principle in Montessori theory is that the learning capacity of a young child is fundamentally different from that of an adult. The difference is not merely the quantity that can be learned: unlike the adult the child appears able simply to absorb, without effort, through participating in an activity. The young child has an “absorbent mind,” which lasts until the child is approximately six years of age.

The first phase of this absorbent mind period is from birth to three years; the Montessori theory emphasizes that this is the most formative time in a child’s development. During this phase the child absorbs all available impressions in detail, and each impression is instantly incarnated into, and superimposed upon, all previous ones. The child responds most to human stimuli, especially the human voice.

Utilizing the surroundings as substance to absorb, the early absorbent mind helps create, at about age three, the child’s basic human abilities.

In the second phase of the child’s development, from age three to six, the absorbent mind continues to function but now appears to be more specific. The mind is focused on certain impressions gained through intentional interaction with the material as well as human environment. These new experiences integrate the abilities earlier created.

The Montessori method always starts with the concrete and gradually builds up to the abstract. For example, a child may begin by grouping and counting beads, and then progress to understanding literal and material sense, and what is meant by adding quantities, before proceeding to work with numbers themselves.

Maria Montessori had one aim: to assist the child's natural development. The end result of this development would be a self-sufficient, well-adjusted adult. Therefore, any assistance we offer to the child's development must, by definition, foster independence and self-sufficiency.

The Montessori approach fosters independence in two ways. First, it provides freedom and independence in learning. Second, it helps the child acquire tools for living: that is, the skills and abilities which give a person choices in life and which make one free from dependence on others.

## **LILLI NIELSEN'S ACTIVE LEARNING APPROACH**

Lilli Nielsen is a world-renowned educator of children who have visual impairment in addition to multiple disabilities. She has published numerous books, lectured all over the world, and completed scientific research on spatial relations in congenitally blind infants. Lilli Nielsen has developed an Active Learning Approach which emphasizes the use of household items for sensory stimulation and concept development.

Lillie Nielsen has stated that children who are at very young developmental levels cannot be “trained” or “taught.” If we provide too much direction, and too much hand-over-hand assistance, we may teach children that only adults direct learning. We may teach them to be extremely passive, and to expect physical assistance. Instead, we need to provide activities and opportunities which are rich and which the child can explore independently. Lilli Nielsen’s choice of materials is both cost-efficient and logical. Electronic toys certainly do have potential for learning, but their appeal is often fleeting. Household items are often rich in sensory features, they are inexpensive and readily available, and the range of items available is almost unlimited.

The main emphasis of the Active Learning Approach is on promoting independent interaction rather than passive participation. Children at very young developmental stages learn by doing; they need to initiate their own tasks and to explore independently. Adults must be willing to set up the environment and help to reinforce what the child has done rather than impose their own priorities. Lilli Nielsen also states that “Repetition, repetition and more repetition creates the necessary conditions for the beginning of experimentation with noises and the desire to experiment keeps alive the sense of curiosity, as well as giving the child even more experience patterns.” (The Comprehending Hand, 1979.)

It is essential to have good understanding of a child’s developmental level, and of the concepts involved in the task we are asking them to perform. For example, when we ask a child to sort blocks according to size, we are asking him to understand the concepts of same, different, large and small. Although the task appears simple, the concepts may be complex. Lilli Nielsen goes on to state, “Problems of this kind should at any rate not be given to the child except in connection with the handling of ordinary, real-life objects as met with in everyday situations.” (The Comprehending Hand, 1979.)

“When the child is able to sort bricks, balls, etc., or articles of the same size but with different kinds of surfaces, then it would be meaningless to keep on exercising just that sorting ability. The ability to sort objects must be extended and combined with other tasks. For example: ‘Here are your jumpers-today you are going to put on the woolly one.’ ‘Here are some forks and spoons. Put one fork and one spoon on each plate.’ ‘Here are the rods. Take the wooden ones, they’re the best ones to use for this game.’ ‘Here’s a basket with eggs. The larger ones we are going to use for hard-boiled eggs; the smaller ones are for baking. Take all the smaller ones because we are going to bake today.’” (The Comprehending Hand, 1979.)

The Active Learning Approach is one which emphasizes the need for materials and learning opportunities which directly relate to meaningful life skills.



### **SOURCE DISCLAIMER**

It is in no way our intent to claim “ownership” of these ideas. There are many creative and imaginative individuals working with young children. By choice or necessity, these individuals have learned to make something from nothing. This manual is a collection of activities we have encountered, or created ourselves over the years. It would be impossible to credit each activity, and thus we acknowledge that credit for this collection is shared among many persons.

### **SAFETY DISCLAIMER**

While every effort has been made to suggest toys and activities which are safe for young children, there is no substitute for individual use of sound judgment. The toys and activities in this collection are suggestions, not recommendations. It is the reader’s responsibility to use their own judgment and knowledge of safety when presenting activities. Children can be unpredictable, and close supervision is essential at all times. It is also essential that adults are aware of possible chemical contaminants or substances which may cause allergic reactions. This may include awareness of latex-containing objects (eg. erasers, balloons) and peanut products (eg. containers which may have contained, or been in contact with, peanut products.) The presenters accept no responsibility for damages resulting from the use of any activities included in this collection.

## NESTING BOXES

**Focus:** concept of large, small, nesting, stacking.

**Materials:** boxes of various sizes, with removeable lids  
wallpaper/construction paper in several  
bold colours.

**Procedure:** Cover boxes and lids with wallpaper in  
matching colours (eg. large box and lid blue,  
smaller box and lid yellow, etc.)  
Child can match lids and boxes, nest boxes  
inside each other, stack boxes, hide items  
inside box.

## CURLER CAN

**Focus:** tactile awareness, fine motor development, concept of  
matching size/shape, concept of in/out.

**Materials:** coffee can with lid  
scissors/ craft knife  
several sizes of velcro-style curlers in bold colours

**Procedure:** Trace sizes of curlers onto the lid, and cut out with scissors or  
craft knife. Lid may be reinforced with duct tape on the  
underside. Child may then push curlers through the correct  
sized hole. Velcro curlers have an interesting texture and  
sounds, and will cling together.

**Notes:** you may vary this activity by covering blocks or thread spools  
with different textures, and cutting corresponding holes in the  
lid.

## CEREAL BOX FELT BOARD

**Focus:** vision stimulation, letters, shapes, understanding of abstract pictures.

**Materials:** empty cereal box  
navy blue/black and white felt (8"x12")  
felt scraps in bold colours  
glue

**Procedure:** Glue the larger felt pieces onto the box; white on one side, black/navy blue on the other. Cut the felt scraps into shapes, letters or numbers. Be sure to choose colours which will contrast with the dark or light felt colours on the box. Store pieces inside the box when not in use.

**Notes:** You may also use a felt-covered box to demonstrate a Braille cell. On the white felt side, use a juice can lid (from a pull-tab can which is not sharp) to trace six circles onto the felt in the pattern of a Braille cell. Use fabric paint or hot glue to make a tactile and visual outline of each circle. Glue the [Ascrachy](http://www.ascratchy.com) side of velcro on to the back of six juice can lids, and use them as the dots when demonstrating the patterns of Braille letters.

## SCENT BOTTLES

**Focus:** awareness of sense of smell, matching scents with pictures

**Materials:** small containers (baby food jars, M&M tubes, etc.)  
scented items (eg. peppermint, peanut butter, lemon,  
coffee, shaving cream, cinnamon, etc.)  
pictures of the above items.

**Procedure:** Place scented items in containers, and poke holes in lids. Child may smell each container, and verbally tell you what they smell, or match the corresponding picture. You may also discuss with the child where they may find these items/scents (eg. kitchen, bathroom, etc.)

## FEEL AND TELL BOX

**Focus:** tactile discrimination, concept of matching.

**Materials:** cereal box or shoe box with lid  
felt (enough to cover top of box)  
scraps of different textures (eg. wallpaper, sandpaper, fabric)  
juice can lids from pull-tab cans (no sharp edges on lids)  
glue

**Procedure:** Cut scraps into circles the size of the juice can lids. Glue scraps on, making two lids with each texture. On one lid of each pair, glue the scratchy side of velcro on to the back. The non-velcroed lids go inside the box; their matching lids are placed on the felt on the outside of the box. The child may then reach inside and try to find the lids which match the ones on the outside of the box. You may wish to begin with a limited number of textures and choices, and gradually build up to a wider range of textures as well as textures which are more difficult to discriminate between.

## TIN CAN WIND CHIME

**Focus:** auditory awareness, localizing sound, orientation

**Materials:** 4 tin cans of various sizes, one end removed, and edges not sharp.  
string  
waterproof paint in bold colours  
juice can lid (no sharp edges)

**Procedure:** Paint each can a different colour and allow to dry. String cans in order of size, with largest at the top. Overlap cans slightly so that the cans easily bump against each other. Hang the juice can lid from the bottom end of the string. Hang wind chime outside, and keep the location consistent. Help the child to explore his surroundings and then locate the sound of the wind chimes again.



## COMPACT DISK MOBILES

**Focus:** vision stimulation

**Materials:** elastic  
plastic clothes hanger or laundry hanger  
compact disks  
yellow, black, white and red craft foam or felt  
black marker

**Procedure:** Leave the shiny silver side of the compact disk uncovered; it will reflect lots of light and colour, especially when placed in sunlight. Cover the other side with contrasting colours of felt or craft foam. You may wish to create bold geometric patterns and faces which infants tend to be attracted to. You may string the disks so that they will reflect each other's patterns. Disks may be hung horizontally or vertically, depending on where the child will be positioned (ie. lying or sitting)

## TOOTHBRUSH HOLDER RATTLE

**Focus:** sensory stimulation, wrist rotation, cause and effect

**Materials:** travel case for toothbrush (choose one which is grooved or has an interesting texture  
rice  
glue

**Procedure:** place a few grains of dry rice into the case and securely glue shut. Encourage the child to explore the texture and sound of the rattle, and to move their hand in different ways to produce different sounds.

## HOT WATER BOTTLES

**Focus:** sensory stimulation, concept of warm/cold, heavy/light

**Materials:** small rubber hot water bottle

**Procedure:** fill the bottle with amounts of warm or cold water. Encourage the child to explore the texture and temperature of the bottle, and to make noises by rubbing their hands on the bottle. You can encourage mid-line play by placing the bottle on the child's tummy while encouraging them to explore with their hands. Some children find the weight of a water bottle to be comforting.

## CAMPING BLANKET PLAY

**Focus:** sensory awareness, motivation to move and explore

**Materials:** silver camping/car emergency blanket

**Procedure:** Camping blankets are durable, light and shiny. They are quite resistant to being ripped/bitten (but always closely supervise their use.) You may place the blanket on the floor under a child: any movement will cause an interesting noise and give the child immediate reward for moving. You may wish to use a flashlight to add visual stimulation/appeal: this may be helpful in encouraging a child to tolerate being on their tummy and raising their head. The blanket may be placed near the child's hands to encourage them to grasp and release, shake, etc. You may also hang a blanket flat against a wall to create an interesting vision stimulation area.

## **MARBLE MASSAGE**

**Focus:** sensory awareness, relaxation

**Materials:** marbles  
Cloth bag

**Procedure:** place marbles into the cloth bag and **securely** sew the bag shut. You can now use the bag to massage a child's back, or to encourage them to manipulate the marbles through the cloth. Marbles have an interesting weight and sound. Supervise closely to ensure that no marbles have become loose and may be swallowed.

## **HAT BOX TOYS**

**Focus:** visual and auditory stimulation, cause and effect

**Materials:** small round (6" to 8" diameter) boxes in bold colours  
elastic  
compact disks  
metal measuring spoons  
glue

**Procedure:** Glue a compact disk to the inside of the top of the box, and thread elastic through so that the box lid hangs vertically. This will catch any breeze and will twist. With elastic, hang a few measuring spoons inside the bottom of the box, and hang the box vertically. This will create an appealing visual effect, as well as providing auditory feedback if the child touches the box. You may also place a large (too large to be swallowed) marble or a heavy ball inside a box, and securely seal the lid. Place the box on it's side and allow the child to roll it. The child will hear the marble moving inside the box, and the box will move in an interesting pattern. You may wish to add shiny stickers or geometric patterns to the box to increase visual appeal.



## BEACHBALL STRETCH

**Focus:** upper body strength, cause and effect, visual and auditory stimulation

**Materials:** brightly coloured beachball or balloons  
dry rice  
string

**Procedure:** Place several grains of dry rice into the balloon or beachball, and inflate. Hang the balloon from the ceiling, and encourage the child to reach up, hit the balloon, listen to the sound and try to aim for the balloon again.

## SENSORY MITTENS

**Focus:** tactile stimulation, hand movement, body awareness

**Materials:** various fabrics of different and distinct textures  
thread  
bells (optional)

**Procedure:** Cut fabric into rectangles large enough to fold over and completely cover a child's hand. Sew the fabric together with the texture on the inside, leaving one end open for the child to place their hand in. Children who are unable to grasp and hold objects can experience different textures by moving their fingers within the mittens. You may securely sew on bells to add auditory appeal, but be careful as this may pose a choking hazard.

## SCOOTER BOARD

**Focus:** The child can lie on his stomach and push with his feet or pull with arms. This activity will enhance locomotion and develop gross motor skills.

**Material:** square piece of wood at least 2 inches thick  
4 wheels  
screws  
sponge  
felt or material (if needed)

**Procedure:** Glue the sponge onto the wood. Screw in the wheels, one at each corner. Cover sponge with felt or material.

## RING AROUND THE BABY

**Focus:** sitting, trunk rotation, tactile exploration

**Material:** two pieces of fabric, each two feet by six feet.  
quilt batting  
thread  
sewing machine  
two cords, two feet long each  
velcro

**Procedure:** Cut one piece of fabric to measure 5 feet 8 inches by one foot ten inches. Fold lengthwise, and sew along the long edge and one short edge to form a tube. Fill with quilt batting, or shredded foam/old nylons. The tube should be firm enough to offer support, but still be able to be bent into a curved shape. Sew the final seam shut.

On the other piece of fabric, fold each short edge (wrong sides together) and sew, to create a casing for the cord to go through. Now fold the fabric lengthwise, right sides together, and sew along the long edge. Turn right side out. Insert cords through casing, pull ends shut and tie cords. Sew or glue Velcro to the top of the ring.

The tube can be bent into a circular shape. Child may sit or be propped within the ring. Interesting toys or objects may be attached with Velcro. This will encourage tactile exploration as well as trunk rotation as the child reaches for the objects.

## CAUSE AND EFFECT BOARD

**Focus:** cause and effect, visual stimulation, hand strength and coordination

**Materials:** 8" by 11" plywood, sanded smooth, with six holes drilled  
heavy cord or rope  
2 matching plastic lids  
2 matching hair curlers  
2 large bells

**Procedure:** Make a hole in one plastic lid and knot one end of a 20" piece of cord. Thread the cord through the lid until the lid reaches the knot. Thread the opposite end of the rope through one hole in the plywood, so that the lid is at the front. Bring the rope back up through another hole, towards the front, and tie on the other lid. Repeat for the other two pairs of items. When the child pulls one item, the matching item will move in the opposite direction.

**Notes:** You may wish to paint the plywood a solid colour, and use highly contrasting colours of rope or items.

## PAPERBAG KICKBALL

**Focus:** Provides an easy object for practicing kicking and throwing. Encourages large motor coordination, eye hand/eye foot coordination.

**Materials:** medium size paper bag  
newspaper  
stapler  
masking tape

**Procedure:** Tear newspaper up into strips or pieces. Stuff newspaper into paper bag until it is about  $\frac{3}{4}$  full, compacting so it forms a roundish shape. Fold the top down and staple it. cover the staples with a piece of tape to secure the bag. You may wish to paint the ball a bright/fluorescent colour.

## POM POM SORTING

**Focus:** colour identification and matching, vision stimulation, fine motor

**Materials:** black felt  
white felt  
pom-poms, various sizes and colours  
containers in matching colours (tubes from M&M minis work great!)

**Procedure:** Place black and white felt squares on a flat surface. Scatter pom poms across both pieces of felt. Instruct the child to place pom poms in the container of the same colour. Observe closely to see if the child misses pom poms of a certain size or in certain areas. Colour perception and contrast sensitivity may also be observed.

## **BEAN SORTING**

**Focus:** sorting, matching, fine motor (pincer grasp,) tactile awareness, colour awareness.

**Materials:** several varieties of dried beans (bulk food stores are a great source.) Be sure to choose beans which contrast in colour, size, shape, texture.  
muffin tin  
storage container for beans

**Procedure:** Place one of each type of bean into a muffin tin hole. Help the child to match and sort the remaining beans.

**Notes:** You may wish to use paint or paper to add contrast to the bottom of the muffin tin holes. You may also sort beans into an egg carton, but muffin tins provide more auditory appeal. Locally available types of nuts may also be used such as acorns, pinecones, sunflower seeds, etc. (be aware of potential allergies!)

## **RUBBER BAND SORTING**

**Focus:** sorting, matching, finger strength, concepts of stretch, snap, long, short.

**Materials:** rubber bands of all sizes, shapes, widths, lengths, colours.

**Procedure:** Help the child to match according to the different attributes of the rubber bands. You may also show them how to stretch the bands so that a shorter band is temporarily the same length as a longer band. This will also help to work on finger strength and coordination.

## ERASER SORT

**Focus:** fine motor activity, tactile awareness, concept of same/different/sorting/matching.

**Materials:** two-bowl plastic pet dish in a pale colour  
Novelty erasers: at least three of each shape  
Black permanent marker or tape

**Procedure:** outline the top of each bowl with a black permanent marker or tape to increase contrast. You may wish to glue contrast colour papers to the bottom of each bowl. Have the child sort the erasers into the two bowls. \*\*\*Be aware that erasers often contain latex, and some children may be allergic to this.

## FUNNY FISHING GEAR

**Focus:** fine motor control, finger strength, vision stimulation, colour awareness, sorting

**Materials:** small plastic fishing tackle box  
Aquarium stones or "jewels": several of each colour  
Tongs for topping strawberries

**Procedure:** Have the child sort the stones according to colour. Have them Use the tongs to make the task more challenging.

## WATER PLAY

**Focus:** tactile awareness, hand and finger strength, pouring, concepts of hot/cold, empty/full, heavy/light, conservation.

**Materials:** metal bowls  
cups, bowls, small containers  
eyedropper  
turkey baster  
syringe  
sponges  
squirt bottles (eg. dish soap)  
pump bottles (eg. soap dispenser)  
tray

**Procedure:** Place supplies on tray (to minimize spillage.) Help the child explore the many ways they can play with water. They may use the eyedropper, turkey baster, syringe and pump bottle to explore suction and pressure while developing hand strength. Using metal bowls will increase auditory feedback. The child can explore soaking up water with a sponge, and wringing it out (hand strength, using two hands together) while discussing the differences in weight when the sponge is empty or full. The child may experiment with the different containers, pouring water from one to the other, comparing the amount of water each will hold.



## TEXTURE STICKS

**Focus:** To match pairs of sticks tactually. Tactile discrimination and concentration

**Material:** 6 textured fabrics  
24 tongue depressors  
white glue  
storage container

**Procedure:** Cut four strips of each fabrics 16 mm wide and 127 mm long. Brush white glue on the sticks. Center the fabrics and press firmly. Be sure all edges are glued securely. The child may be asked to find all four of one texture, or to organize sticks into sets (one each of several textures) You may present the child with three sticks of the same texture, and one of a different texture, and ask the child to give you the one which is different. You could also create a pattern of textures for the child to copy.

## SANDPAPER STICKS

**Focus:** to match sticks of like-textured sandpaper by feel

**Material:** 12 tongue depressors  
sandpaper in coarse to fine textures  
white glue  
storage container

**Procedure:** Cut 2 strips of sandpaper for each texture and glue to sticks. Place sticks in random order on a flat surface. By feeling the sticks the child will match the textures together.

## CEREAL SORTING

**Focus:** sensory awareness, sorting, matching.

**Materials:** ice cube tray/muffin tin/containers  
different types of breakfast cereals: Fruit Loops, Cheerios, Rice Krispies, Corn Flakes, Shreddies, Lucky Charms.

**Procedure:** The child may sort the cereals into the different containers/compartments. They can sort by size, texture, taste, smell, shape, etc. For example, Cheerios are the same shape as Fruit Loops, but will smell and taste different.

## SOFT AND HARD SORTING

- Focus:** tactile discrimination, concept of hard/soft, sorting
- Materials:** 2 cardboard sheets, approximately 9@ by 12@ each  
or two bins or boxes  
marker  
Braille labeler  
small piece of wood (to be labeled)  
small piece of sponge (to be labeled)  
glue  
collection of hard and soft materials (eg. hammer, coins, mirror, cup, seashell, marbles, shirt, grapes, bread, sweater, feather, teddy bear, slippers, towels, yarn).
- Procedure:** Glue piece of wood to one piece of cardboard or onto the bin/container, and label it Ahard@ in large print and Braille. Glue the piece of sponge to the other piece of cardboard or onto the other bin/container, and label it Asoft@ in large print and Braille. Give the child the collection of hard and soft objects, and help them to sort them into the appropriate areas.

## LID MATCHING

- Focus:** matching size and shape, fine motor coordination, hand strength, wrist rotation.
- Materials:** various containers with removable lids. Eg. coffee cans, baby food jars, screw-top containers, dish soap bottles.
- Procedure:** Present all containers to the child . They must match lids to containers, and use two hands together to screw on lids. Containers may fit inside each other, giving the opportunity to explore size, etc.

## CYLINDER SIZES

**Focus:** sorting, size concepts

**Materials:** cardboard cylinders (all same circumference): paper  
towel rolls, toilet paper rolls  
scissors

**Procedure:** With scissors, cut the cylinders into different lengths. The child can then sort them from smallest to largest.

**Notes:** You may wish to cut the cylinders at very regular lengths, and make several of each length, so that the child may explore quarters, halves, thirds, etc.

## WEIGHT BOTTLES

**Focus:** awareness of weight, comparisons.

**Materials:** 6 plastic bottles with lids  
water  
glue

**Procedure:** Fill each bottle with increasing amounts of water, from empty to full. Glue lids on securely. Children can compare the weights of each bottle, and place them in order from lightest to heaviest. You may wish to add food colouring to the water for use with children with low vision.

## MYSTERY SOCKS

**Focus:** identifying objects by touch, labeling objects/vocabulary, matching pictures to objects.

**Materials:** adult-size thick socks  
labels: Braille and large print  
pictures of objects  
objects: eg. feather, pencil, toothbrush, nail, toy car, rubber band, spoon, wool.

**Procedure:** Place one object inside each sock. The child must reach into the sock, and without looking, identify the object and then find the correct picture or label.

## ROCK SORTING

**Focus:** sorting, matching, comparing sizes, shapes weights.

**Materials:** several pairs of rocks, of different shapes and sizes

**Procedure:** Help the child to match up the rocks, and to make comparisons of size, shape, colour, texture and weight.

**Notes:** You may also vary the temperature of the rocks by refrigerating them or heating them with hot water. The child may then sort by temperature. Rocks will tend to hold temperatures for longer periods of time.

## SLIDING BALL

**Focus:** hand-eye coordination, tracking, upper body strength.

**Materials:** newspaper  
knitting needle  
non-toxic paints in bold/neon colours  
4 feet sturdy string or nylon rope  
craft knife  
round balloon  
water and flour/wall paper paste/glue  
dish pan

**Procedure:** Mix flour, water and wallpaper paste in dishpan to make paste. Tear newspapers into strips. Blow up balloon and tie knot. Cover balloon to about 1/4 inch thick with strips of newspaper which have been dipped in the glue mixture. Allow to dry thoroughly, then paint with bright colours. Cut two holes in opposite ends of the ball, with each hole being about 2 inch diameter. Thread rope through both holes with the knitting needle, then double back again. Tie ends of rope together. Near each end, tie knots so that rope won't slip back through the ball. The child can hold the loop in both hands so that the ball slides back and forth.

**Notes:** Use bold contrasts, black and white stripes, or shiny tape to make the ball more visually interesting. You may wish to seal a bell inside the ball.

## FLOAT AND SINK

**Focus:** categorizing, properties of water, concepts of float/sink, concept of opposites.

**Materials:** dishpan  
water  
two bins  
Braille labels  
marker  
clear Mac tac  
objects: bar soaps, cork, wood, marbles,

**Procedure:** Label one bin "sink" and the other "float" with both Braille and large print. Cover the print label with clear Mactac. Fill the dishpan with water. The child can experiment with the objects to see which sink and which float, and then place them in the appropriate bin. Try to include some items which are similar in shape and material, but which may not both float or sink. For example, some brands of bar soap float while others do not.

**Notes:** For older children, you may wish to expand on this topic. Help children to make a tactile mark of water level in the dishpan. The child may then add various objects, and check how the water level has changed. The child may then try to predict how the water level will change when various objects are added, and check the accuracy of their prediction

## ICE CUBE TRAY TEXTURE MATCHING

**Focus:** tactile awareness, concept of same/different/matching

**Materials:** one 12-cube ice cube tray  
12 one-inch blocks  
six different fabrics/textures

**Procedure:** Glue matching textures onto pairs of blocks. You may need to cover only two or three sides so that the blocks will still fit into the ice cube tray spaces. Place six different textures along one side of the tray. Present the tray to the child and ask them to match the blocks by placing a block in the space beside it=s match.

**Notes:** This activity may be expanded to involve a pattern of blocks for the child to match or continue.



## FOLLOWING FOOTSTEPS GAME

**Focus:** encourages children to develop large muscle skills. Child will develop skills in counting as well as the concepts of left and right.

**Material:** vinyl, rug sample or shower curtain  
felt  
scissors  
dice  
Velcro

**Procedure:** Cut out felt footprints and put Velcro on one side. The footprints are placed on the mat close enough together so the child can step or hop from one another. Child will roll the dice and move forward on the footprints.

Add music to this activities or add different tasks (ie: hop on one foot, take a long stride, use right foot ...)

## MAGNET SORT

**Focus:** to sort magnets by attaching them to a metal cookie sheet.

**Materials:** 5 identical sets of magnets  
non-aluminum cookie sheet  
storage container

**Procedure:** Sort magnets by rows wither vertical or horizontal. Depending on the type of magnets you use the child may sort by colour, texture, shape or similar features.

Presented by Jennifer Urosevic and Lee-Anne Cross, Texas Focus Conference, June 2003.  
Use personal judgment and close supervision to ensure child's safety when using these activities.

## PEG BOARD

**Focus:** to develop fine motor skills.

**Materials:** 2 pieces of peg board, each 12" square  
golf tees  
sandpaper  
four one-inch blocks

**Procedure:** Use sandpaper and blunt the points of the tees. Glue the blocks in each corner between the two pieces of pegboard (to separate them.) Separating the two pieces allows the child to see and feel where the peg has gone when it goes "through." The objective of this activity is to place the golf tee into the pegboard creating a design and increase fine motor skills. You may wish to paint one or both pieces of peg board to improve colour contrast.

## SENSORY BOTTLES

**Focus:** To pair the matching bottles by sound or smell. This activity will encourage sound distinction and olfactory perception.

**Material:** bottles with lids, film containers  
sound bottle material- salt, pennies, paperclips, rice etc.  
aroma bottles- cinnamon, vanilla, peppermint, ginger, nutmeg

**Procedure:** Wash the bottles out really well. Fill the bottles with the material of your choice, making sure you make two of each. Encourage the child to sort and match the bottles together.

## **SIMPLE SORTING**

**Focus:** sorting tasks encourage children to recognize likenesses and differences and to organize items by categories based on identifying characteristics. This activity will also enhance fine motor development and perceptual skills.

**Material:** 6 cup muffin tin  
beads of different size and shape  
storage container

**Procedure:** The child will sort the beads or shapes into the muffin tin cups.

## **PAPER BAG SEARCH**

**Focus:** colour, shape and number recognition, categorizing, problem solving

**Materials:** paper bags  
pieces of paper, different colours  
pieces of cardboard cut into different shapes  
pieces of cardboard with numbers in print and/or Braille

**Procedure:** each child receives a bag to collect items in. Each child is given a card with directions regarding what they are to find. Eg. a piece of red paper will tell them to locate red items. A piece of cardboard with a circle on it will tell them to find items which are circular/round. The child may then collect items from within the classroom/home or outside.

## **POKE & PEEK**

**Focus:** encourages fine motor development and eye-hand coordination.

**Materials:** colander  
tin bowl  
coloured toothpicks

**Procedure:** Invert the colander. The child will insert the toothpicks into the holes. Add a tin bowl underneath the colander and it will give auditory feedback to the child.

## **AQUARIUM GRAVEL SCOOP AND SEARCH**

**Focus:** fine and gross motor skills, tactile and auditory awareness, concepts of heavy/light, empty/full, scoop/pour.

**Materials:** metal cake pan  
Aquarium gravel (wide variety of bold colours available)  
Stones, shells  
Cups and containers

**Procedure:** pour gravel into pan. Encourage child to scoop and pour gravel (good sound on metal pan, and fairly heavy to increase feedback from muscles) You may also wish to hide shells and stones in the gravel and have the child do a tactile or visual search for them. The pan and gravel may also be used to have the child trace shapes or letters.

## TEE BOWL

**Focus:** to fit the golf tees into the holes in the bowl lid. This activity will enhance manual dexterity and fine motor skills.

**Materials:** large plastic bowl with snap on lid  
golf tees  
paper hole punch  
sand paper

**Procedure:** Blunt the points of the tees using the sand paper. Use the hole punch to punch holes around the rim of the lid spacing them an inch apart. Put the lid on the container. The child may then place the golf tees into the holes. You may wish to add a high contrast colour around the holes to make them more visible.

## MUSICAL PIPES

**Focus:** This activity provides opportunity for the child to associate words and sounds, such as loud or soft.

**Material:** piece of pipe 2 ½ inches long  
wire or string  
empty thread spool  
spoon

**Procedure:** Place string through pipe and spool and tie, allowing the pipe to swing freely. The spool would act as the handle and the pipe would echo the sound of the spoon tapping it.

## SOUND MATCHING

**Focus:** auditory awareness, concept of matching, concept of loud/soft sounds

**Materials:** 10 watchmaker tins (available in hardware stores)  
*or*  
10 tubes from M&M minis candy  
2 teaspoons oatmeal  
2 teaspoons sugar  
2 teaspoons flour  
8 Cheerios  
8 kernels unpopped popcorn

**Procedure:** Place equal amounts of food into pairs of tubes (eg. Two with one teaspoon of oatmeal each.) Glue lids shut tightly. When completed, give the child one of each pair, and instruct them to find the matching container. You may also help the child to become aware of high/low/loud/soft sounds.

## CONCEPT GAME

**Focus:** concept development (cardinal directions, left, right, body parts, under/over, etc.)

**Materials:** 20@ x 20@ cardboard sheet  
approximately 50 4@ x 6@ cards  
black felt-tip marker  
hot glue gun and bold coloured glue

**Procedure:** Create a tactile/high contrast grid on the cardboard, as shown below. Each space should be approximately 2@ square. On the cards, write the following questions in large print using the felt-tip marker. Braille may be added if desired. Players take turns answering questions, with each moving ahead one space for each correct answer. Questions may be customized to work on any concepts you wish, for example Y

- What body part goes into your pant leg first?
- Blow a kiss
- Which side of the road do you walk on when there are no sidewalks?
- This body part helps you to taste
- Wink
- Place the dice in the palm of your hand
- What is the function of your teeth?
- Place your hand at shoulder height
- In what cardinal direction does the sun set?
- Hold this card under the table
- Stand behind your chair
- Place your arms perpendicular to each other
- Where would you hear an echo?
- What part of the cane touches the ground?

**Contributed by: Brenda Peacock, Orientation and Mobility Instructor, CNIB**

## TAPPING HELPER

**Focus:** to teach child to move a white cane in a proper, side to side, "sweeping" motion. As the cane comes in contact with the "helper" the child will get auditory feedback from the cane tip hitting the tin lids.

**Materials:** 6 pieces wood (1" by 3"), each 30" long  
4 pieces wood, 8" long  
hinges  
screws  
juice can lids from pull-tab cans (never use lids which are sharp!)

**Procedure:** Make two separate "helpers." For each helper, attach 3 long pieces of wood to each other with hinges (folding will allow for ease of transportation.) At each end, attach an 8" length onto the longer board (so that it is now 2" thick.) This will allow more stability when you stand up the helper. Screw juice can lids on one side of each helper, making sure there is no space left between lids.

Set helpers up parallel to each other. Demonstrate or assist the child to move their cane from side to side so that the cane makes contact with the lids. Width of the path can be varied according to cane length. Alternately, a single helper may be used, with a wall as the other side. Hinge types may be varied so that you can create a path with curves or corners.

**Contributed by: Brenda Peacock, Orientation and Mobility Instructor, CNIB**



## **BRACELETS AND BUTTONS**

**Focus:** numbers one to ten, sorting, grouping, fine motor skills

**Materials:** ten brightly coloured bracelets  
white felt  
55 buttons

**Procedure:** Lay the felt out flat on the table (it provides colour contrast and also helps to keep the bracelets and buttons from slipping.) Lay the bracelets side by side in a row. The child can place one button in the first bracelet, two in the second bracelet, and so on.

## **KEY MATCHING**

**Focus:** tactile discrimination, finger coordination, matching

**Materials:** plywood, 8" by 10" sanded smooth  
six hooks (screw-in type)  
six pairs of keys

**Procedure:** Screw the hooks into the board in two rows of three hooks each. Place one key from each pair on a hook, and have the child attempt to find the identical key and place it on the same hook.

## LOCKS AND KEYS

**Focus:** fine motor skills, practical life skill, concept of open/shut.

**Materials:** padlocks  
bicycle locks  
doorknob with lock  
key ring (easily opened)

**Procedure:** Present one or more locks and keys to the child, and have the child try to match keys to locks. Show the child how to insert the key and turn it, listening and feeling to see if the lock has opened. Prompt the child to try another key if the first one does not work. Help the child to strategize about awareness of sizes and types of keys, what to do when locks won't open.

## KEYS FOR LEARNING

**Focus:** putting keys on hooks develop fine motor skills. Matching the key shapes provides a perceptual task for older children.

**Materials:** 6 keys  
Square piece of wood  
6 hooks  
Glue  
Bristol board

**Procedure:** Lay the six keys on to bristol board and trace around the keys with a marker then cut them out. Glue them on the wood. Screw the hooks on to the wood 2 ½ inches apart in 2 rows.

The child then will match the shape of the keys with the keys attached to the wood.

## **BUTTON SORTING**

**Focus:** fine motor, tactile discrimination, sorting, large/small.

**Materials:** egg carton or muffin tin, or ice cube tray  
buttons: various sizes, colours, shapes and textures

**Procedure:** Children can sort the buttons into sections of the containers. They can sort by size, colour, texture, or shape.

## **PINCUSHIONS**

**Focus:** fine motor, number concepts

**Materials:** pieces of foam or corkboard, approximately 4@ by 4@  
pins with coloured plastic tops, or bulletin board pins  
fabric paint  
marker  
Braille labeler

**Procedure:** Mark each piece of foam or corkboard with a print and/or Braille number. You may also wish to add the corresponding number of dots with fabric paint. The child can push the correct number of pins into each piece of foam/corkboard.

## CLOTHESPIN MATCHING GAME

**Focus:** fine motor control, concept of matching

**Materials:** coffee can  
wallpaper/Mactac to cover can  
spring-type wooden clothespins  
scraps of different textures  
glue

**Procedure:** Glue wallpaper onto coffee can. Mark the can into at least six sections (vertical.) Glue one texture on to one section. Glue the same texture on to one clothespin. Repeat until you have six different textures on the can, and six clothespins with matching textures. The child will develop finger strength as they try to clip the clothespeg to the top of the can in the matching section.

**Notes:** This game can be used for any type of matching: colours, textures, Braille letters, tactile or high contrast shapes, etc.

## MATERIAL SORTING

**Focus:** sorting, matching, tactile discrimination, vocabulary

**Materials:** tin pie plates  
glue  
small pieces of the following materials: leather, plastic, rubber, glass, metal, wood,  
black felt-tip marker  
Braille labeler  
assorted objects (eg. wallet, belt, necklace, key chain, cup, key zipper, tin box, can, eyeglasses, mirror, bottle, washers, mat, gloves, ball, toys, thread spool, block, stick.)

**Procedure:** Label each pie plate in large print and Braille, and glue on the corresponding material sample. The child may then sort the objects into the correct material category.

## PIGGIE BANKS

**Focus:** sorting, matching, fine motor, money

**Materials:** baby food jars with lids  
assortment of coins: loonies, quarters, dimes, nickels, pennies.  
marker  
white paper for labels  
Braille labeler

**Procedure:** Cut a slit in each jar lid, large enough for coins to go through. Label each jar with a name of coin. You may wish to glue a coin on the front of each jar as well. The child may then sort coins into the various jars.

**Notes:** You may vary the activity by labeling the jars with different amounts of money; the child must then place the correct combination of coins in the jar (eg. label 35 cents, and child can find combinations of coins that add up to 35 cents.)

Presented by Jennifer Urosevic and Lee-Anne Cross, Texas Focus Conference, June 2003.  
Use personal judgment and close supervision to ensure child's safety when using these activities.

## HOUSEHOLD SORTING

**Focus:** sorting, classifying

**Materials:** various items used for different tasks (eg. sock, shirt, mitten, necklace, ring, watch, spoon, fork, cup, toothbrush, comb, soap, toothpaste, pencil, crayon, pen, eraser, paper, doll, block, marble, toy car, etc.)

**Procedure:** The child can explore the items, discuss what each item is used for, and sort the items into classifications: clothing, hygiene, toys, eating/cooking utensils, etc.

## MARBLE SORTING

**Focus:** sorting, classifying, fine motor skills, Braille awareness

**Materials:** marbles of different sizes, textures and colours  
Ice cube trays, containers  
Novelty ice cube tray (makes ½ inch round ice)

**Procedure:** have the child sort the marbles by size or colour. You can use the novelty ice cube tray to place small marbles in the holes to increase fine-motor skills, or to place them in patterns of Braille letters

## NUMBER CANS

**Focus:** counting, number concepts

**Materials:** tin cans with no sharp edges, lids removed  
Braille labeler  
marker  
tactile dots/fabric paint  
tongue depressor/Popsicle sticks

**Procedure:** Label each can with a number. You may wish to add the corresponding number of dots. The child can then place the correct number of sticks into each can.

**Notes:** You may also label the cans with addition and subtraction questions. You can vary the game by using vases and flowers instead of cans and sticks.

## THE SCREW GAME

**Focus:** observing size difference, fine motor skills, life skill, wrist rotation

**Materials:** plywood board, sanded smooth  
bolts and nuts (various sizes)  
screwdriver  
drill

**Procedure:** Use drill to drill holes into the wood. Glue nuts over the holes in the wood. The child may then match bolts to the nuts, and use the screwdriver to screw in the bolt.

## RELATED OBJECTS JARS

- Focus:** associating objects which belong together, vocabulary, logic
- Materials:** baby food jars  
glue  
objects: stamp/envelope, key/lock, tire/toy car, needle/thread,  
eraser/pencil, slate/stylus, flower/vase, nail/hammer
- Procedure:** Fasten one item of each pair onto the jar. The child must then place the corresponding object in the jar.

## OUTLINES

- Focus:** one-to-one correspondence, observing size and shape of objects, noticing similarities and differences, matching, understanding of abstract representation.
- Materials:** sturdy cardboard, 12" by 18"  
hot glue gun and glue sticks  
objects (eg. key, pencil, comb, blunt scissors, paper clip, clothespin, toy car)
- Procedure:** On cardboard, trace each object in pencil. Use glue gun to cover pencil marks with glue to make a tactile outline. The child must then match the object to the correct outline.



## **BOLT BOARD**

**Focus:** fine motor development, matching size, life skills

**Materials:** nuts, bolts and knobs of various sizes and types  
glue (optional)  
thin wooden board (optional)

**Procedure:** Present the child with nuts and bolts and have them screw the correct nut onto the corresponding bolt.  
Optional: mount bolts by inserting bolts through a sheet of wood, and secure in place by gluing the underside of the board.

## **MEASURING SPOONS**

**Focus:** nesting, sorting sizes, fine motor coordination

**Materials:** metal measuring spoons

**Procedure:** Help the child to stack the spoons according to size, and discuss concepts such as biggest, smallest, etc. Talk about what spoons may be used for. Have child scoop materials to compare the different quantities each spoon will hold.

## HOOK BOARD

- Focus:** fine motor coordination, hand-eye coordination, one-to-one correspondence, size comparison.
- Materials:** plywood board  
25 hooks (screw-in type)  
washers (five sizes)
- Procedure:** Ensure that the board is sanded smooth. Screw in hooks in 5 rows of 5 hooks each. The child can then place washers on the hooks in a random fashion, or you may have them order the washers from largest to smallest, or to copy a pattern of sizes. You may wish to prop the board up vertically, so that the child has to reach upwards to place the washers on the hooks, building upper body strength.

## CORNERS

- Focus:** concept of corners, categorizing, sorting
- Materials:** two containers (to sort items into)  
objects with angles/corners (eg. boxes, blocks, cardboard squares/triangles/rectangles)  
objects without corners (eg. marbles, cardboard circles, bottles)
- Procedure:** Help the child to sort the objects according to whether or not they have corners. Discuss other places you might find corners, where they are used in buildings, other ways in which rooms are constructed.

## TACTILE GRAPHING

**Focus:** tactile discrimination, matching, sorting, categorizing shapes

**Materials:** craft foam  
scissors  
heavy cardboard  
hot glue gun

**Procedure:** On the cardboard, draw a 12" by 12" square. Create a grid by dividing the square into four columns and four rows (3" by 3" squares.) Outline all squares with hot glue to create tactile lines. Cut the craft foam into four each of four different shapes. Glue one of each shape in the top square of each column. The child may then sort the remaining shapes into the correct columns.

## DOMINO STICKS

**Focus:** tactile discrimination, matching

**Materials:** wooden tongue depressor sticks  
scraps of different textures  
glue

**Procedure:** Glue a texture on to one end of a stick, covering the width of the stick and about one inch of the length. Glue a different texture to the opposite end of the stick. Continue to glue textures onto sticks, ensuring that the same texture is used on several sticks, so that the child can later match the textures by laying the sticks end to end, and play dominos.

**Notes:** you can vary this activity by using shapes or Braille letters instead of textures.

## SHAPE STICKS

**Focus:** to match pairs of sticks containing like shape combinations.

**Materials:** tongue depressors  
foam shape pieces  
glue  
storage container

**Procedure:** Make two sticks of each shape combination. Use shapes like: triangle, square, oval, circle, diamond, cross, semi-circle, heart. Create stick that have two of the same shape and two different shapes. Place sticks randomly on flat surface and match together. Point out to the child that they need to match both designs.

## TACTILE LOTTO

**Focus:** tactile discrimination, turn-taking, following instructions and rules

**Materials:** heavy cardboard  
hot glue gun  
various textured materials (sandpaper, velvet, corrugated paper)

**Procedure:** cut cardboard into several 15" squares. On each square, create a grid of 3" squares. Outline the grid with hot glue to make tactile lines. Cut fabrics into 2" squares, and glue textures into the squares. To play, the adult describes a texture, and the child must check their board to see if they have a fabric that matches that texture. Players may continue until they have identified all of the textures in a row, or all of the textures on the card.

## DOWEL MATCHING

- Focus:** size discrimination, sorting and matching, ordering
- Materials:** wooden doweling, five different diameters, 3 feet of each  
Velcro  
glue
- Procedure:** Cut each strip of dowelling into three sections of 12" each. Glue Velcro onto the ends of each segment. Help the child to compare the sizes of dowelling, to attach the matching sizes together, and then to place the completed sets in order from largest to smallest.
- Notes:** You may vary this activity by attaching hooks instead of Velcro, and hanging the dowels from a horizontal rod. The child may still match the sizes, but will have the more challenging task of hooking the dowels together, as well as developing upper body strength by reaching up to hook the dowels.

## BELL STICKS

- Focus:** to match the bells according to their sound.
- Materials:** tongue depressors  
bells of different size (two of each size)  
ribbon  
glue  
storage container
- Procedure:** Attach bells to sticks by tying them on to ribbon, then securely gluing the ribbon to the sticks. By ringing the bell sticks the child must match the sounds.

## WEAVING BOARD

**Focus:** to weave the ribbon over and under the elastic. This will enhance skills of manual dexterity, fine motor skills and concepts of over and under.

**Material:** square board  
1" wide elastic  
staple gun  
ribbon  
storage container

**Procedure:** Cut elastic into 12" lengths and place them on the board side by side. Staple the ends of them to the back of the board. Cut the ribbons into equal lengths and dip the ends into glue so that they will not fray.

This child will take the ribbons and weave them over and under the elastics. Be sure to use solid coloured ribbons which will contrast with each other and with the board. Various textures of ribbon may also be used.

## TOP THE BOX

**Focus:** increase fine motor development and perceptual skills in recognizing and matching sizes. This activity also promotes concepts of open, closed, top and bottom.

**Materials:** boxes with lids (different sizes)  
foam numbers or puffy paint  
glue  
buttons or foam shapes

**Procedure:** Glue the foam numbers inside the box and on the lid of the same box. Glue buttons or foam shapes also on the lid of the box to encourage the child to count. Place boxes and lids randomly on a flat surface. The object is for the child to match the correct box with its proper lid.

## SHAPE MATCHING GAME

**Focus:** turn-taking, following directions, matching shapes, tactile discrimination

**Materials:** heavy cardboard or foam core board, 18" by 24"  
hot glue gun  
coloured glue sticks  
craft foam  
cardboard cut into 2" by 2" squares

**Procedure:** Using the hot glue gun and high contrasting colours of glue sticks, create a winding pathway of squares across the board. Cut sets of matching shapes from the craft foam (eg. star, circle, square, diamond, etc.) Glue these shapes in the squares on the pathway in a random order. Glue the remaining shapes onto the cardboard squares. Children must determine which shape is on the next square on the path. They then draw from the pile of cardboard squares. If the shapes match, they move ahead one space. If the shapes do not match, their opponent takes a turn.

**Notes:** Textures or Braille letters may be used instead of shapes.

## SCALE

**Focus:** to experiment with weight and balance.

**Materials:** an 18" length of 1"x2" board  
2 small plastic containers  
contact cement or epoxy glue  
heavy cord, 12 " long  
screw eye  
S Hook (optional)  
small nuts in the shell  
storage container for nuts

**Procedure:** Glue the containers on the ends of beam. Put the screw eye in the centre of the beam. Tie one end of the cord through the screw eye and tie the other end in a loop. Use the S hook to hang the beam from a curtain rod, tension bar, or in a doorway. The board should hang flat. The child can then experiment with placing different sizes or quantities of nuts in the containers, to see which end of the scale will dip, how they can make the two ends balance, etc.



## WASHER BAR

**Focus:** to sort and grade the washers according to size as you place them on the board. Will enhance manual dexterity, comparing skills and problem solving skills.

**Material:** piece of wood 1"x2" 12" long  
5 finishing nails  
25 washers: 5 sets of 5 each in graduated sizes  
storage container

**Procedure:** The child can sort the washers according to size or sort  
In sequence.

**Notes:** You may wish to add a screw eye to the centre of this board, and use six evenly spaced nails, so that the board may be hung and used as a scale. Children may experiment with sizes, combinations, and placements of washers.

## **STOP AND GO RACE**

**Focus:** turn-taking, counting, left/right, stop/go

**Materials:** piece of heavy cardboard/foam core, 12" by 24"  
hot glue gun  
coloured glue sticks  
marker  
Braille labeler (optional)  
two small toy cars  
20 pieces of Braille paper, 2" by 3" each  
red and green construction paper or craft foam

**Procedure:** Using the hot glue gun and high contrast colours of glue, create a grid with two columns and 12 rows. The top row should read "finish" and the bottom row should read "start." Each child chooses a car to use as their marker. On the cards, print or Braille instructions: go ahead, go back, go left, go right, stop. There should be several of each instruction. Children may take turns choosing a card from the pile and following the directions.

## SHAPE FINDER

**Focus:** encourages the child to recognize shapes patterning and a sequential pattern.

**Materials:** craft foam  
index cards  
scissors

**Procedure:** Cut out shapes from the craft foam and glue them on the index cards in a sequential order. Cut out extra shapes so that the child can match the pattern or expand the pattern.

## PIZZA PIN UPS

**Focus:** encourages the child to learn correct numerical value by counting and matching. Clothes pins provides fine motor development.

**Materials:** circle cardboard cut out  
tactile object to be glue for counting  
clothes pins  
ruler  
marker  
puff paint

**Procedure:** Divide the circle into 5 even sections (like a pizza). Place The tactile marking in each of the section of the board in quantities from 1-5. On the clothes pins use puff paint to write the number and corresponding number of dots. The child will clip the correct clothespin with the corresponding section on the circle.

## CUBE IT

**Focus:** Provides practice in counting objects and matching the correct amount to each number.

**Materials:** tag board  
puff paint  
cubes or blocks

**Procedure:** On the Tag board draw a number using the Puff Paint, beside the number add the corresponding dots. Write the number in any order along the left side of the board. This will allow enough space for the blocks to be built beside the number.

## BOTTLE CAP COUNTER

**Focus:** this activity reinforce the concept of 1 to 1 number correspondence

**Materials:** bottle caps  
puff paint  
bristol board/Tag board

**Procedure:** Use puff paint to write numbers 1-5 across the top of the board. Trace the corresponding number of bottle caps underneath each of the numbers. Once dry the child can match the bottle caps underneath the numbers in the outlines provided.

## HAIRSTYLE FUN

- FOCUS:** fine motor skills, tactile awareness, life skills
- MATERIALS:** peg board cut into 6" by 4" oval  
Ribbons: various widths, colours and textures  
Hair clips, bobby pins, barrettes of various sizes, colours and types
- PROCEDURE:** Pull ribbons through holes and knot securely at back of board. Have the child put the hair clips onto the ribbons to increase fine motor coordination, awareness of colour contrast, and exposure to textures.

## MICROWAVE MARBLES

- FOCUS:** pre-Braille skills, fine motor control
- MATERIALS:** microwave dish with grooves  
marbles to fit into grooves
- PROCEDURE:** Place one marble in each groove, and push all marbles to the left side. Some microwave dishes are shaped in way that will keep the marbles at the side without slipping down to the next groove. Help the child to start at the top left marble, and push it across to the right side of the dish. The child must then follow the edge of the groove back to the left side of the dish, and find the next marble down. Continue to track the marbles from left to right, top to bottom, in the pattern that the child will eventually need to track lines of Braille.

# **DAILY ROUTINES**

Many skills can be worked on throughout daily routines. Rather than providing detailed descriptions of activities, we have listed skills which may be developed while participating in daily routines. We hope that these lists will remind parents and professionals of the many skills that children may develop while also developing skills of independence.

## **Washing Dishes**

On/off (taps)

Wrist and hand strength

Concept of wet/dry

Concept of clean/dirty

Stacking (to fit dishes in cupboard)

Sorting (to fit dishes into draining rack, into cupboard)

Nesting (to put bowls in cupboard, cups together)

hot/cold (water)

olfactory awareness (smell of food, dish soap)

concept of full/empty (pouring, rinsing)

auditory awareness (squeak when clean)

tactile awareness (sticky, bubbly, slippery)

## **Laundry**

Clean/dirty

Size comparison

Matching colours (find same colour socks)

Sorting colours

Sorting by size/owner of clothes

Sorting by type of clothing (socks, towels)

Matching patterns (socks, towels)

Folding

Large/small

Shapes (towels are rectangular, fold to be square)

Textures

## **Setting The Table**

One-to-one correspondence (one plate for each)

Matching shapes/objects (may wish to use bold marker

to outline shapes of dishes, or use dishes to set one place for the child to use as a model)

stacking/nesting (to carry dishes)

matching colours of dishes

comparing sizes of dishes

comparing shapes of dishes

awareness of social skills

## **Cooking/Baking**

Measuring

Pouring

scooping

Textures (wet, dry, rough, smooth, sticky)

Scents (of each ingredient, combinations of ingredients, changes when cooked)

Tastes (of each ingredient, combinations of ingredients, changes when cooked)

Stirring/mixing (hand strength)

Reading recipe (literacy)

Hot/cold

Discuss safety issues regarding stoves, knives, etc.

Change in texture/form when foods are raw, mixed, cooked, frozen

Life skills/self help skills

Social skills (independence, hosting others)

## **Feeding Pets**

Full/empty dishes

Scents (of food and pets)

Clean/dirty (dishes)

Discuss and demonstrate responsibility for pets

Pouring

Measuring

Discuss and understand needs of animals

## **Caring for Plants**

Wet/dry

Textures of dirt, leaves, stems, water

Observe growth

Shapes of leaves, blossoms

Scents of plants

Discuss and demonstrate responsibility for plants

Discuss and understand needs of growing things

## **Tidying**

Sorting (types, sets, rooms items belong in)

Clean/dirty

Discuss safety, mobility issues

Develop organization skills

Discuss and demonstrate responsibility

Stacking, nesting

Awareness of containers (sizes, empty/full, open/shut)

## **Vending Machines/Pay phones**

Cause and effect

Fine motor skills

Money concepts

Social skills



# TOYS FROM AROUND THE HOUSE

There are a number of common objects which can be used in a variety of ways to elicit vision, hearing and touch. These objects cost very little or no money to construct. They can be used in unusual ways with the visually impaired and multiply-handicapped, to encourage their individual creativity. It is important to not limit the child's experience with that object to the perceived "right way" only. Be aware of any opportunity and show of interest from the child. If they are interested in an object -use it!

The following is only a beginning. Every individual situation and child will lead to the creation of more ideas.

## Plastic Pot Scrubbers

-can be used for their tactile component and can also be used as a noise make on cement, sandpaper, pots, etc.

## Tin Foil Plates

- can be used for folding into different shapes
- can also be used for noise-making by scratching on it.
- great for sorting games
- great to hang as part of a mobile

## Balloons

- great for fine motor development
- can feel, squeeze, build into shapes
- can make squeaky sounds by squeezing the neck as the air escapes, can have the escaping air flow into the child's face/body (watch that it does not startle the child)

## Tin Cans

- great to drop things into the can and listen to the different sounds: pennies, macaroni, stones, buttons, nails, etc.
- can use the can empty or filled with water to note the differences
- can be used as nesting cups - use graduated cans from large juice cans, vegetable sized cans and baby food cans...

### Bottles and Jars

- can be used for matching in size, colour, weight, (put sand in, etc.)
- can be used to practice screwing and unscrewing of lids (best used in appropriate settings, such as at meal time preparation)

### Boxes

- all sizes, big, small, square, rectangular, appliance-sized (which can be made into little rooms and then played in, on or around)
- can take a fridge sized box and replicate a room, complete with door, windows, wall paper, rug ceiling, etc. to have the child experience all four walls, ceiling, etc. for concept of room
- it would be best to have the child build as much of the “room” with you to understand the start-to-finish aspects of the project

### Bean Bags

- can use all different shapes and sizes as well as textures
- can have the child help to fill the individual bags with all sorts of objects (beans, stones, marbles, sand, etc.)

### Wading Pools

- can fill them with different materials - water, water and sand, water and mud (our children must have all sorts of experience), water and bubbles, Indian corn, etc.

### Bags

- all different sizes and texture - plastic, green garbage bags, paper, aluminum foil bags, etc. can be used to put things in, take things out, crumple up, etc.
- the thin, plastic bags from Sears have an especially interesting sound

### Sandpaper

- can rub it together
- can use the different grades of sandpaper for different sounds and textures
- can tack sandpaper onto blocks of wood to rub together
- great to colour on with crayons. After colouring, you may *carefully* heat the sandpaper to melt the crayon; very interesting effects.

## Eggbeater

-can use it in different textures - water, water with soap, water with jello, water with sand, water with loose muck, etc.

## Tools

-real hammers (can be small) and nails may be easier to manipulate, especially if the child is at a hand over hand level  
-can use real nuts and bolts (large, stove or big equipment size may be easier to hold in terms of weight instead of the usual plastic ones which can be slippery)  
-real sanders can be used with little fear of the child hurting themselves if the finest sandpaper is used. This is excellent for children who love and respond positively to vibration  
-can use saws in a hand over hand approach. The child can learn the concept of cutting, etc.

## Sorting Activities

-many different common household items can be sorted. This has a dual purpose. The child can practice sorting and at the same time become familiar with objects that he will be using all of his life. The child can learn to sort silverware, towels, washcloths, socks, underwear. He can also sort crayons, buttons, jars, and jar lids, plastic bowls, measuring spoons, etc.

## Mobiles

-can use many different types of materials - paper, coloured objects, shiny pictures and wrapping paper, noise-makers, hanging objects, spinning toys, ribbons, cotton balls, tin foil, mirrors, paper towel rolls covered with different textures, etc.  
-can have the child make the mobile with adult  
-can hang it over the bed, wheel chair  
-can change the mobile to different sides of the room or bed  
-can change the mobile with different themes  
-can test the different responses from the child to different materials, noise-makers (look for the child's preference)

### Scrapbooks

- can be made from different types of paper, cardboard, corrugated paper, felt on cardboard, etc.
- can use it to identify texture (paper, wood, cork, plastic, flat buttons, toothpicks, Popsicles. etc.)
- can make up daily activity books with souvenirs from the child's different activities so he can read them

### Toy Storage

- Scott (1977) suggests using a large toy box with wheels. This box would keep the toys nearby the child as it could be wheeled around with the child. It could be big enough for riding in. It should be made in such a way that it would be easy for the child to push it. This would encourage some mobility on the part of the child. It would also help the child learn about neatness. It would prevent losing toys. It would also help to prevent the child from slipping or ripping on the toys when they learn to pick them up and put them in the box.

### Christmas lights

- can use the outdoor Christmas lights, starting with one colour - perhaps red. With close supervision, they could be bunched up in a handful size and used in a darkened room to work on tracking abilities. The use of the flasher plug can also elicit good results of responding. (Check with the medical personnel if the child has seizures as this may not be an appropriate activity.)

### Plastic tubes

- can be used for tracking activities
- can use transparent plastic tubes (12 - 18 inches) filled with oil - drop solid coloured marbles in the tube, one at a time. Move the tube in a variety of movements and follow the movement of the marble.

# MUSICAL TOYS

The ability to perceive sound is very important for all visually impaired children and especially so for the multiply-handicapped. Auditory awareness is an excellent tool for the child to develop and can be done in a variety of ways with a variety of toys and instruments. The child can first learn about the instrument and what it does and how to produce the sound. The multiply-handicapped child may need quite a bit of hand-over-hand manipulation. They can learn to produce and then to match patterns of beats. They can learn the difference between fast and slow, between high and low, and between loud and soft sounds.

The following list includes just some of the numerous instruments - both commercially produced or homemade.

## Drums

-all sizes, with different sizes of strikers. Different sized drums produce different sounds. It is possible to make drums from different sizes of cans, with rubber placed on the top. Strikers can be made by piercing a rubber ball with a sharpened piece of doweling. The child can help to construct the drums, then colour or paint the cans. The cans could also be covered with wallpaper or yarn.

## Bells

-all sizes, from tiny ones to big school bells. Bells could be attached to wrist bands if the child has poor motor control. They could also be attached to ankle bands and finger bands.

## Tambourines

-all sizes, different tones, some can be used with strikers. These are great for children with poor motor control as only a little effort can produce a noise. They can be made using tin plates or strong cardboard and pop bottle caps. They could also be made by using the tin foil plates turned to face each other with little bells placed inside. The child can help to make these and then paint, crayon and/or glue materials and ribbons on as streamers. The streamers are a good addition for children who are not too mobile, as they can feel the movement of the streamers past their bodies along with the sound.

### Pianos / Organs

-all sizes, all types (real and play size). Pianos and organs are great for these children. The vibration of these instruments is great, especially if the child is at a beginning awareness stage. Put the child right beside (or inside, if possible) so many parts of their body are touching the piano. Watch for initial startling, it is best to avoid this, so start by playing soft, soft sounds and build up volume and variety as soon as the child seems comfortable. Many of the toy pianos are very colourful, so this may also attract the child.

### Blowing instruments

-whistles, horns, trumpets, etc. -all kinds and sizes, and all tones. The child needs the skill of blowing first. If they can blow, give as much exposure as possible to different types. They may not be able to blow one kind, but they may have success with another kind of blowing instrument.

### Traditional Musical Instruments

-clappers, tone blocks, triangles, maracas, hand castanets, etc. These are all valuable instruments. Ensure that the child has all the necessary fine and gross motor control. These are the types of instruments commonly found in regular music circle times and if the multiply-handicapped child can use them, either alone or with some hand-over-hand help, they can participate in the group.

### Homemade Instruments

-plastic tubes, metal film cans. etc. filled with flour, rice, pebbles, salt, peach pits. seeds, marbles, etc. These can all be made with the child. They can be used for matching of similar or same kinds of sounds. They could also be used for sorting sounds into loud and soft. They could also be used to sequence sounds from soft to loud.

### Auditory Awareness

-can also occur around the house. Sound cues such as wind chimes, radios, loud ticking clocks and cassettes can be used to help the child figure out where he is.

# TACTILE EXPERIENCES FOR SENSORY AWARENESS

Have the child take their shoes off both indoors and outside in order to feel different textures - rugs, tile, wood, rungs on the crib, legs on the furniture, grass, mud, stones, rocks, sand, gravel, cement, logs, garden dirt, etc. (just watch for glass, dangerous objects?)

## Textured Floor Coverings

-these are great for the child who is starting to move around and explore - corrugated paper - all colours, plywood, rubber mats, plastic mats, linoleum, velour, different piles of carpet, etc. Many children only experience laying in the playpen or on blankets on the floor.

## Tactile/Texture Bins

-can use sand and water tables for: dry sand, wet sand, cornmeal, Indian corn (very colourful), macaroni - all shapes, bran (good for children who like to put things in their mouths as it will not hurt them), Ivory Snow Flake Goop)

## Painting

-finger paints are great for children who like to get their fingers dirty - can use chocolate pudding for the children who are more timid. Shaving cream, regular and menthol, are also good for painting.

## Textured Boundaries

-good for children who tend to use too much space - can use masking tape, wood pieces, popsicle sticks, cork, coarse sandpaper, glue spread around a sheet and sand sprinkled on it. Placemats can also be used to define a child's space.

## Sewing Cards

-can be homemade with large holes around the perimeter of the image to allow a child to both see and feel the outline of the images, then use a large needle and wool.

## Textures

Visually impaired children should experience as many different textures as possible. Safford (1978) feels that children should learn about tactile attributes and the differentiation (like vs. unlike) and the classification of them. Some of the textures suggested are: soft, hard, fuzzy, scratchy, smooth, rough, cold, warm, sharp, crisp, thick, spongy, furry, bristly, springy, bumpy, stiff, prickly, flexible, etc.

Several textures can be joined together for further experiences: cotton is both soft and light, feathers are soft and stiff, plastic is both smooth and flexible, styrofoam is smooth and scratchy, metal is cold and smooth, and a coil is cold and springy.

It is good to start with textures in the child's immediate environment. In this way, the child will have more opportunity to experience the particular textures.



## RECOMMENDED READING

Gilbert, LaBritta (1984.) *I Can Do It! I Can Do It! 135 Successful Independent Learning Activities*. Mt. Ranier Maryland: Gryphon House Inc. ISBN 0-87659-107-1

Bishop, Denise (2000.) *Independent Life Skills Trays*. Phoenix Arizona: The Foundation For Blind Children. ISBN: 1-930178-01-8.

Leary, Bernadette and von Schneden, Margaret (1982.) *“Simon Says” Is Not The Only Game*. New York, New York: American Foundation For The Blind. ISBN: 0-89128-109-6

Redleaf, Rhoda (1987.) *Teachables II: Homemade Toys That Teach*. St. Paul Minnesota: Toys ‘N’ Things Press. ISBN: 0-934140-41-3.

Nielsen, Lilli (1979.) *The Comprehending Hand*. Copenhagen, Denmark : Socialstyrelsen-National Board of Social Welfare.

Nielsen, Lilli, (1992.) *Space and Self*. Copenhagen, Denmark: Sikon. ISBN: 87-503-9566-1.

Nielsen, Lilli (1992.) *Educational Approaches*. Copenhagen, Denmark: Sikon. ISBN: 87-503-9568-8.

Gilbert, Labritta (1989.) *Do Touch: Instant, Easy Hands-On Learning Experiences For Young Children*. Mt. Rainier, Maryland: Gryphon House.

Chmela, Harriet; Mitchell, Grace and Dewsnap, Lois (1992.) *I Am! I Can! A Preschool Curriculum. Activities For The Classroom*. Chelsea, Mass.: TelShare Publishing Company, Inc.

Gettman, David (1987.) *Basic Montessori: Learning Activities for Under Five*. New York, New York, St. Martin Press Inc ISBN: 0-312-01215-2.

## **KIDS WHO ARE DIFFERENT**

Here's to the kids who are different,  
The kids who don't always get A's.  
The kids who have ears twice the size of their peers,  
And noses that go on for days.  
Here's to the kids who are different,  
The kids they call crazy and dumb.  
The kids who aren't cute and don't give a hoot,  
Who dance to a different drum.  
Here's to the kids who are different,  
The kids with the mischievous streak.  
For when they have grown,  
As history's shown,  
It's their difference that makes them unique.

**By: Digby Wolf**

**<http://www.magicinterludes.net/differentkids.html>**

## **EXCERPTS FROM AN ARTICLE ON THE “MOTHERING” WEBSITE: ARTICLE ABOUT HOME-MADE TOYS**

[http://www.findarticles.com/cf\\_0/m0838/1999\\_July/59116009/p1/article.jhtml](http://www.findarticles.com/cf_0/m0838/1999_July/59116009/p1/article.jhtml)

“Some of the kites took to the air with ease, and some of them never got aloft no matter what flying strategies were used. Other kites appeared incapable of flight, but suddenly became airborne when a child made a slight adjustment to the strut or the tail or the tension on the string. When these reluctant kites finally went up, there was much rejoicing along with animated explanations of kite-flying strategies. As kites rose and fell, heated debates arose about what makes a kite fly well, followed by vows to make even more aerodynamic kites in the future. The kids' sense of pride in their kites was palpable. No store-bought kites could have brought these children as close to the mystery and physics of flight as their own creations.”

*Continued...*

“When we give children the chance to play with homemade toys, we give them more than just toys. The boy who observes his sister gradually constructing a treehouse comes to understand the meaning of patience and careful workmanship. The friends who make a tent out of blankets and chairs intuitively grasp the meaning of self-reliance; they know how to construct their own amusements. The girl who creates an entire airport out of shoe boxes, paper cups, and pipe cleaners learns to value her creativity. Her planes take to the air and fly further than any adult would have foreseen, propelled by her own vision and wisdom.”

## **THE CASE FOR FUNCTIONAL SKILLS**

He is 18 years old, TMH (30-40 I.Q.) and has been in school 12 years. He has had a number of years of “individual instruction” and he has learned to do a lot of things!

He can now do lots of things he couldn't do before!

He can put 100 pegs in a board in less than 10 minutes while in his seat with 95% accuracy.

But he can't put quarters in vending machines.

Upon command he can “touch” nose, shoulder, leg, foot, hair, ear. He's still working on wrist, ankle, hips.

But, he can't blow his nose when needed.

He can now do a 12 piece Big Bird puzzle with 100 percent accuracy and color an Easter Bunny and stay in the lines!

But, he prefers music, but was never taught how to use a radio or record player.

He can now fold primary paper in halves and even quarters.

But, he can't fold his clothes.

He can sort blocks by color, up to 10 different colors!

But, he can't sort clothes; white from colors for washing.

He can roll Play Dough and make wonderful clay snakes!

But he can't roll bread dough and cut out biscuits.

He can string beads in alternating colors and match it to a pattern on a DLM card.

But, he can't lace his shoes.

He can sing his ABC's and tell me names of all the letters of the alphabet when presented on a card in upper case with 80 percent accuracy.

But, he can't tell the men's room from the ladies' room when we go to McDonald's.

He can be told it's cloudy/rainy and take a black felt cloud and put it on the day of the week on an enlarged calendar (with assistance.)  
But he still goes out in the rain without a raincoat or hat.

He can identify with 100 percent accuracy 100 different Peabody Picture Cards by pointing!  
But he can't order a hamburger by pointing to a picture or gesturing.

He can walk a balance beam frontwards, sideways and backwards!  
But he can't walk up the steps or bleachers unassisted in the gym to go to a basketball game.

He can count to 100 by rote memory!  
But he doesn't know how many dollars to pay the waitress for a \$2.59 McDonald's coupon special.

He can put the cube in the box, under the box, beside the box, and behind the box.  
But he can't find the trash bin in McDonald's and empty his trash into it.

He can sit in a circle with appropriate behavior and sing songs and play "Duck, Duck, Goose."  
But, nobody else in his neighborhood his age seems to want to do that. I guess he's just not ready yet.

**By: Preston Lewis**

**<http://members.tripod.com/~imaware/functional.html>**