

Getting Ready For Braille - Pre-Braille Skills and Activities

There are lots of games and activities that your child can enjoy to help prepare them for learning Braille in the future. Skills to build include concepts such as same and different, tactile awareness and perception, and fine motor skills such as exploring objects with their hands and using their hands cooperatively. It is important that your child has a good grasp of these skills before beginning Braille. Your Early Years Visual Impairment Play Specialist and/or Specialist Teacher for Visual Impairment will support and guide you, to enable your child to develop these essential pre-braille skills.

Stage 1 - Key Concepts

Key concepts will naturally form part of your day-to-day talk and will develop over a long period of time.

Start by teaching/ensuring that your child is familiar with, the following basic concepts:

1. Rough and Smooth
2. Soft and hard
3. Small and big
4. Sorting by a specific characteristic
5. Same and different

Teaching Rough or Smooth (Stage 1 Key Concepts)

Remember to use real objects as much as possible. Find objects that are rough and smooth around the house or setting, or outside on walks and trips.

Example items that are rough: the edge of a key, textured wallpaper, sandpaper, bark of a tree, paths and walls, corrugated card, a scouring pad, carpet.

Example items that are smooth: plastic cup, metal bowl, candle, ribbon, fabric, dinner plate, table top, a door, the side of a car, a slide, pebbles, windows.

Talk about how the objects feel using lots of descriptive words. How do your fingers feel as they touch? Is this smooth or rough? Which do you prefer?

Teaching Soft or Hard (Stage 1 Key Concepts)

Your child may wish to bang or hit objects against a surface so it is important to manage this safely.

Example hard items may include: a fork, the remote control, a door, the wall, the table top, the handle of their hairbrush, tins from the cupboard, a wooden spoon, the car door, their lunchbox.

Example soft items may include: pillows and cushions, sponges used to wash cars or dishes, soft toy, squishy ball, playdough, a blanket, car seat, sand.

Use descriptive words. Talk about how the soft objects are different from the hard ones. When we feel something soft, it is easy to push. After you have introduced both hard and soft separately, then mix up the items.

Teaching Small or Big (Stage 1 Key Concepts)

When you first begin teaching small or big, make sure the size difference is extremely different, wherever possible. Begin by comparing big and small of the same object, for example the big spoon/little spoon, the big shoe/little shoe. You may wish to extend your child's understanding, for example using a matchbox car to show small and then go outside and touch a real car to show big. As your child understands the concept and his or her tactile skills improve, they will be able to tell the difference between objects that are quite close in size.

Example big items may include: a car, a chair, the table, the TV, a tree, also include 'big' spaces for example walking around a park perimeter or around the outside of a building.

Example small items may include: car keys, a biscuit, a box of raisins, a Cheerio, a toy car, toothbrush, a coin, the TV remote, mobile phone, duplo brick, small flower pot, door handle.

Talk about how it is hard to wrap our arms around (hug) something that is big and that it takes a long time to walk around something that is big. Next introduce things that are small. Once the child understands the difference

between big and small, begin to refine the concept by presenting items that have a smaller difference in size. Use comparisons wherever you can, eg "The door is big, but the door handle is small.

Sorting by a Specific Characteristic (Stage 1 Key Concepts)

Once your child has a basic understanding of the concepts of rough/smooth, hard/soft, and big/little, then they will be ready to sort objects by a specific characteristic. Feely bags or 'treasure boxes' can be fun ways of encouraging younger children to sort. Begin by sorting objects into just 2 groups and gradually increase as your child develops. For example, sorting into hard and soft groups or sorting between metal and wooden objects. Sorting is a play-based activity that will encourage your child to develop their tactile skills.



Teaching Same or Different (Stage 1 Key Concepts)

You can use lots of different items to teach same and different. Since many children have difficulty grasping the concept of different, begin by teaching the concept of same. Gradually introduce the idea of same and not the same. Then go to same and different. Start with 3D real objects and always begin with objects that are familiar to your child. You may gradually move to objects that are glued to paper.

Stage 2 Hand Coordination and Grasp/Release

Your child will need to learn to use both hands with strong and mobile fingers. The following activities will help to develop their fine motor skills including palmar grasp, thumb and finger grasps and pincer grip, as well as their hand and finger strength. It is important to develop their arm and shoulder strength first.

Developing Arm and Shoulder Strength:

- Throwing balls/beanbags into a ball pool, bucket or hoop
- Reaching up to catch soft balls
- Batting a balloon to and fro using hands, arms and shoulders
- Rolling a hula hoop around arms
- Mark making on a large scale
- Jumping and moving around to pop bubbles
- Ribboning activities and programs such as "Write Dance"
- Dance and musical movement games
- Action songs and rhymes involving large scale movements



Developing Palmar Grasp and Release: (involving the palm of their hand)

- squeezing toys - e.g. squishy/bouncy ball
- passing toys between hands
- squeezing playdough/modelling clay
- taking objects out of containers
- drawing and mark making
- stacking rings/stacking cups
- using a cookie cutter
- using a hole puncher
- throwing hand-held balls



Developing Grasp and Release with thumb and fingers:

- stringing beads/threading cards
- holding paper for cutting

- using crayons/pencil/paintbrush
- using glue sticks
- pinching playdough/clay
- building towers with blocks
- using musical toys such as castanets, maracas
- playing with sand, cornflour, rice, dried pasta
- joining duplo or sticklebricks
- turning pages of a book
- picking up small objects with tongs
- putting shapes into a shape sorter
- posting objects into containers (bottle lids, cotton reels, bricks, ping pong balls, pegs) Old washed and cleaned container pots such as crisp tubes make great posting pots; use with lid removed or cut a large slot in the plastic lid.
- buttoning, zipping and snapping - on own body



Developing Pincer Grip:

- popping bubble wrap
- picking up small objects (if appropriate) eg Cheerio/raisins
- threading activities such as stringing beads or threading cards
- threading or pushing pipe-cleaners through a colander
- putting clothes pegs on edges of cups, jars or saucepans
- turning knobs on a wind-up toy
- using tongs/tweezers of different sizes to pick up different objects e.g. pom poms, beads
- sprinkling seeds for planting
- helping to decorate cakes with small sweets, fruit pieces
- using a pipette to transfer coloured water between cups
- putting coins or bottle lids through a small slot in a container
- sorting activities using real objects where possible, eg buttons

- placing smaller objects in containers with small posting slots (these can be made simply at home using old crisp tubes/coffee tins with a slot cut into the plastic lid) Try posting bottle lids, buttons or pipe-cleaners



Stage 3 Hand and Finger Strength, Finger Isolation

To operate the keys of a Braille machine, your child will need strong and mobile fingers. They will also need to be able to hold up/name/show certain fingers in preparation for using the keys on a Brailier. You can help your child to build this awareness by singing finger rhymes and songs. Many of the activities suggested above in Stage 2 will help with hand and finger strength. You may also like to try these additional ideas:

- crumpling paper into balls
- placing clothes pegs on edges of cans, jars or saucepans
- stretching rubber bands over containers
- manipulating playdough - kneading, squeezing
- squeezing glue/paint bottles
- using stapler held in hand
- using stapler by pushing
- using rolling pin
- using a hole puncher
- pushing together and pulling apart construction bricks
- sponge painting
- squeezing sensory soft balls



Finger Isolation

Your child will need to practice using their fingers both one at a time, and together. You might like to try:

- pushing buttons on a hairdryer and other appliances
- playing a musical instrument such as a toy keyboard
- making fingerprints in playdough or clay
- turning dials on activity boards
- pushing buttons and levers on games, eg "Hungry Hippos"
- singing finger rhymes and songs, such as "Two little Dickie Birds"
- singing finger rhymes with specific names for each finger such as "Tommy thumb"
- naming each finger, the names can be linked to songs and rhymes
- showing fingers on request, eg "Where is your Ruby ring finger?"
- using finger puppets, these can be made at home using the fingers of old gloves or cones of paper



Stage 4 Bilateral Hand Use and Rotary Motion

Your child will need to learn to use their hands independently of each other. However, they may find that to begin with both hands will want to move together. Practice makes perfect 😊 Stabilising with one hand and manipulating with the other hand may be hard for your child. Many of the stage 2 activity ideas will help with this, but below are some specific activities which will help to develop this skill further:

Encouraging Bilateral Hand Use:

- pulling tape off a roll
- tearing paper strips while holding paper with one hand
- twisting lids on and off
- cutting paper using scissors
- using a hole puncher

- using a ruler to make lines
- holding container with one hand/placing object in with other
- stabilising toy with one hand/using other to play with toy
- pushing together and pulling apart construction bricks
- finger painting
- rolling "snakes" and "balls" with playdough/clay
- attaching paper clips to paper
- tracing around an object/stencil
- holding paper with one hand and stapling with other
- stabilising bowl while stirring



Rotary Motion (takes place from wrist with stable arm)

- assembling plastic nuts and bolts from 'Workshop' toys
- turning volume knobs on car radio
- manipulating lids on and off jars/tubes
- mixing food in bowl
- turning taps on sinks
- using wind-up toys, music boxes
- turning doorknobs
- scooping sand, gravel, dried beans
- finger painting
- painting with cornflour
- finding objects hidden in sand, dried beans
- unwrapping individually wrapped sweets
- pouring from one container to another



Stage 5. Light Touch and Tracking

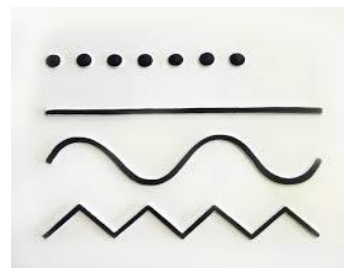
To help develop touch skills and finger sensitivity, encourage your child to use the pads of their fingertips for the activities below:

Light Touch

- work on whole body relaxation - if your body is tense, your fingers will be unable to touch lightly
- place cotton balls or counters beneath the child's fingers and try to move them across the page
- use tactile books such as the "That's Not My..." series to encourage light touch
- feeling sequined and textured clothes
- learn to "tickle" the dots

Tracking

- tracking across pipe cleaners/straws glued to paper - it can be a good idea to signify the 'end' of the line with a counter or pom pom.
- tracking from left to right across tactile puzzles
- tracking from left to right across like symbols which follow closely without a space
- tracking from left to right across unlike symbols which follow closely without a space
- tracking from left to right across like symbols which have one or two spaces between them
- tracking from left to right across unlike symbols which have one or two spaces between them



Stage 6 Familiarisation with the Braille Cell

A Braille cell is made up of 6 dots. You can support your child's understanding of this formation by using large scale sets of 6 for posting and sorting activities.

- An empty egg box with six ping pong balls is a good way to introduce a child to the all important six dot positions in braille. Play at making different patterns. You might even use toy balls, satsumas, toy eggs or chocolate eggs!



Don't Forget - Language Supports Learning

Just as it takes time for children who will be print users to be ready to begin reading and writing in print, so it takes time for children who will be Braille users to be ready to begin reading and writing in Braille.

Alongside understanding basic concepts and the hand/finger activities listed here, your child will need to develop a range of auditory skills in an environment rich in language.

Encourage and support your child to:

- Locate sound making toys hidden in a room
- Recognise familiar sounds such as bird song, the doorbell, hairdryer
- Identify 'favourite' or familiar programs, songs or tunes on the radio/TV
- Imitate sounds
- Discriminate between loud and soft, fast and slow sounds
- Repeat short sentences
- March and dance to simple rhythms
- Repeat simple rhythms by clapping or using musical instruments

- Follow simple commands and instructions
- Sing and join in with action songs
- Make rhythmical patterns by tapping a drum
- Recognise rhyming words
- Join in with simple stories
- Be aware of letter sounds linked to real objects, eg "a" for "apple" "t" for "teeth"
- Segmenting sounds in words, eg "Cat c-a-t"
- Blending sounds together to make words, eg "r-a-t makes rat"