

Children, Young People and Families Occupational
Therapy Team

FINE MOTOR SKILLS

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Developing Early Fine Motor Skills

Grasping

The best objects to use for a young child are toys that are easy to pass from hand to hand such as soft rattles with handles or rings.



Banging toys



Learning to bang items down will help to strengthen your child's grasp and encourage controlled arm movements. This activity can be done in a variety of positions i.e. with the child sitting in an adult's lap and banging on a table surface, sitting in a high chair and banging on the tray, etc. Items that are suitable for banging include spoons, rattles and plastic hammering toys.

Dropping

Dropping toys is a natural stage in a child's development and should be encouraged. Activities to use with the child can include:

- Dropping toys in the bath (rubber duck, sponge). Demonstrate dropping the toy and making a splash and encourage your child to do the same.
- Dropping toys over the edge of the high chair and watching them fall or dropping them onto the highchair tray.
- Dropping toys onto a surface to make a noise, for example, i.e. toys that squeak when dropped, dropping toys into metal bowls, etc.

Taking items out of containers

Children generally learn to take objects out of containers before they put them back in. This is a normal developmental stage and will help the child to develop grasp patterns for a variety of different objects. This skill can be encouraged using activities such as:

- Removing shapes from a shape sorter toy
- Taking blocks/bricks out of toy buckets
- Removing toy people from dolls houses/toys buses etc.
- Removing pieces out of inset jigsaw puzzles
- Removing shoes from a shoe cupboard

Releasing into Containers or Holes

Once the child has learned to pass a toy purposefully and can drop a toy they are ready to learn to release into a container. This again is a normal developmental stage and will help the child to release with accuracy. Activities to encourage this can include:



- Dropping favourite toys into boxes, bags, bowls or containers. This can be made more fun by using toys that make a noise when they are dropped into the container or by using a container that will encourage a noise e.g. metal bowl.
- Commercially produced toys sometimes have chimneys or openings that are fun for children to drop objects into.
- Very simple shape sorters with only one opening may be suitable but beware of making the task too difficult too early.

Placing Items Down

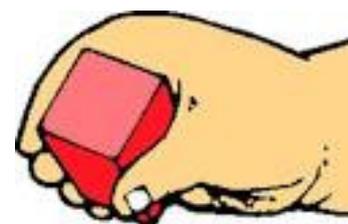
This skill involves being able to place objects down in an upright position on a flat surface. Activities that encourage this skill could include:

- Placing a drinking cup down on the table surface after drinking. Initially this could be a beaker with a lid. As the child develops introduce a cup without a lid but only put a small amount of drink in the cup to avoid excessive spills. If necessary use a weighted cup that will right itself if not placed own flat.
- At bath time encourage the child to pick up toy ducks, sponges, etc. from the bathtub and place them on the side of the bath. Make this more fun by watching them fall in again.
- Place cars on a toy garage ramp and watch them roll down.
- Practice placing toy people/cars etc. in an upright position during play.
- Place toy-bowling pins in an upright position and then knock them over with a large ball.

Palmar Grasp

Encourage your child to encircle the handle of toys with their fingers and thumbs. This will help to strengthen the fingers and the thumb joints ready for picking up smaller items in the future. Some objects useful for doing this are:

- A cup without a handle, placing the thumb around the cup
- Toy plastic hammers and other toy tools
- Small balls
- Balls of playdough/plasticine
- Any toy with a handle.



Tripod Grasp

This involves your child beginning to isolate their thumb and first two fingers to pick up and release objects rather than raking up the object into the palm of the hand. Some toys and activities to help encourage this grasp include the following:

- Placing and removing large pegs in/out of peg boards.
- Puzzles with large knob handles
- Removing and replacing lids from large marker pens
- Square blocks.

Finger Co-ordination

As your child develops they will need to learn to move their fingers separately from each other. This is an important skill that will help them to achieve later skills such as using a computer keyboard, tying shoelaces, and using a can opener.

Pointing

Pointing is the first developmental activity that prepares the child for later finger co-ordination skills. Some children may point with the whole hand rather than the index finger. If this happens, then gently close the rest of the hand leaving only the index finger to point with.

Encouraging individual finger movement (Finger Isolation)

Once a child has learnt to point they will then begin to poke objects with the index finger. Activities to encourage this include:

- Pre-school books with finger holes
- Finger puppets
- Toy dial telephones
- Holes in Duplo blocks
- Poking holes in playdough/plasticine.

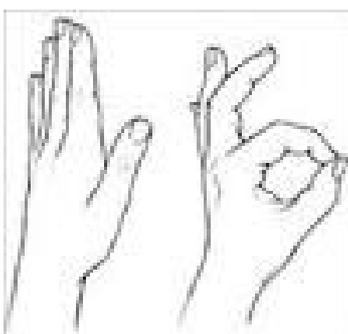


As your child develops, other activities that encourage individual finger movement can be introduced. Activities to encourage this include:

- Turning on and off light switches (they will need to be supervised and probably held up to do this activity)
- Pushing the doorbell button
- Switching on the T.V, stereo, etc.
- Pushing the buttons on touch-dial toy phones
- Pushing the buttons on toy tills, cookers
- Action songs and finger rhymes (e.g. round and round the garden, two little blackbirds, one two three four five)
- Books with tabs to push, pull and turn

- Turning the pages of books, initially board books and then progressing to books with paper pages
- Use shaving foam or finger paint and encourage your child to freely move their fingers about to produce different patterns (i.e. pretend to play the piano)
- Musical keyboards – encourage your child to use different fingers to produce a sound. Later on encourage playing of simple instruments such as a recorder
- Card games – Picking up and holding cards can help to develop hand stability and finger co-ordination. Start with simple matching games such as snap and encourage the child to deal out the cards
- Snacktime – give the child small objects e.g. raisins, chocolate buttons, Cheerio's etc. to encourage them to use their fingers to pick them up.

Pinch and Thumb Control / Finger Opposition



This is the ability to pick up very small items using the thumb and index finger in opposition to each other (pincer grasp). Your child will first learn to bring the sides or pads of their thumb and index finger together to grasp a small object. They will then progress to being able to pick up an object using the tips of the thumb and index finger.

Activities to encourage development of the pincer grasp are given below:

- Finger feeding – young children are often motivated to pick up small pieces of food using this grasp. If your child has difficulty doing this you may need to start by gently guiding their index finger and thumb towards each other.
- Separating stacking/nesting cups from within each other
- Releasing disc like objects into slots i.e. tops from Pringles containers into wide horizontal slots made in boxes. Progress onto releasing coins into a moneybox or coins into parking meters and vending machines as you child gets older.

- Pinching clothes pegs and attaching them around the edge of a shoebox or similar.
- For older children playing games such as Connect Four and having to pick up the discs using a pincer grasp.
- Cake decorating – using hundreds and thousands to decorate cakes will encourage use of a pincer grasp.
- Sorting activities to encourage the child to pick up small objects using a pincer grasp e.g. beads, dry pasta shapes, coins and games such as pick up sticks.

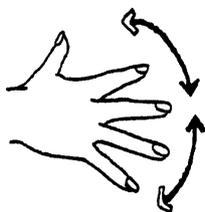
Range of Movement Exercises – Fingers and Thumb



- Put your forearm on a table
- Start with your fingers bent, then slowly straighten your fingers until your hand is flat on the table



- Place the palm of your hand flat on the table.
- Lift your thumb and each finger off the table in turn



- Place the palm of your hand flat on a table
- Spread your fingers out, then bring them together



- Put your elbow or the back of your hand on the table
- Put your thumb against each fingertip in turn



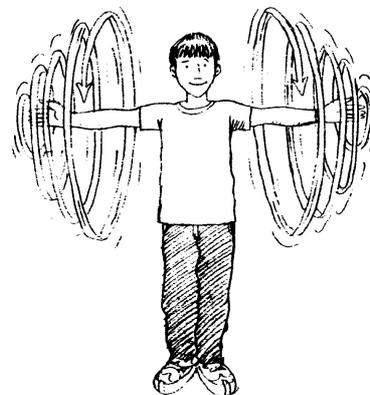
- Hold all fingers straight
- Make a big circle with your thumb

**IF ANY OF THE EXERCISES CAUSE SEVERE PAIN OR DISCOMFORT,
DISCONTINUE AND CONTACT YOUR THERAPIST**

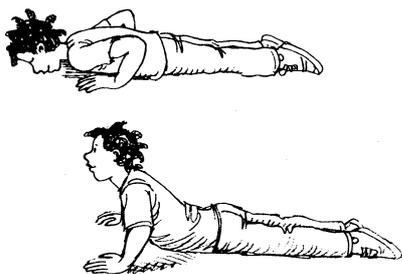
Fine Motor Warm Ups

Shoulder Spirals

- Hold both arms out horizontally to the side and start to circle them, initially making small circles but gradually getting larger until the circles are as large as possible, (this should take about 5 rotations).
- When the circles have reached full size, change direction and gradually reduce the circles, (again taking about 5 rotations) to get back to the smallest size.
- Start by trying to complete 3 spiral sequences then gradually build up the number you can do. Aim to do 10 spiral sequences comfortable. This will help improve your stamina when writing.



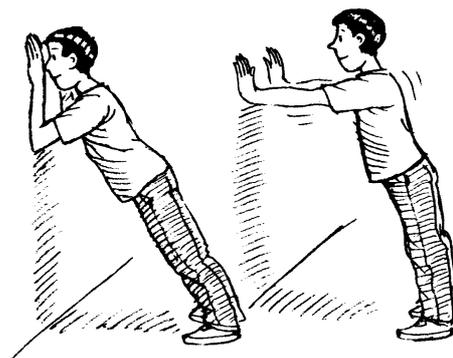
Half Push Ups



- Lie face down on the floor and push your body up with your arms in the same way as a normal press-up, but keeping your tummy on the floor. (if you are able to lift your tummy off the floor then you can do this)
- Repeat 10 times.

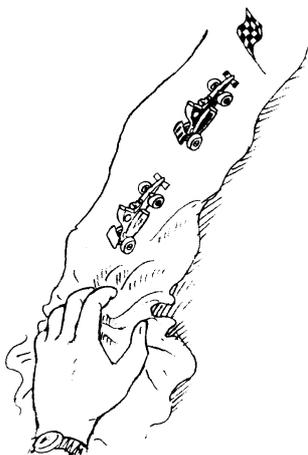
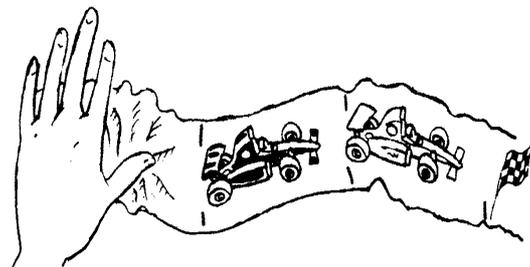
Wall Push Ups

- Stand facing a wall about 1½ arms length away from it.
- Stretch your arms out in front (keeping them at shoulder level) to place your hands flat on the wall. Then bend your arms to try to bring your face to the wall, without moving your feet.
- Keeping your body straight, straighten your arms, pushing yourself away from the wall.
- Repeat 10 times.



Creeping Thumbs

- Use a long thin piece of material such as a bandage. Sit at a table and stretch the material out horizontally (as shown).
- Put your writing hand at one end of the material (right side if right handed, left side if left handed). The palm should be on the table with the fingers resting on the material. Try and gather up the material, tucking it under your hand, using only your thumb and keeping your wrist still.
- Complete 5 times; try to increase your speed each time.



Creepy Crawlies

- Sitting at a table, place the material in front of you, stretching it out vertically.
- Put your writing hand on the end of the material nearest to them to anchor it. Try to gather up the material, using the fingers of that hand only while keeping the wrist still.
- Complete 5 times; try to increase your speed each time.

Other Warm up Activities

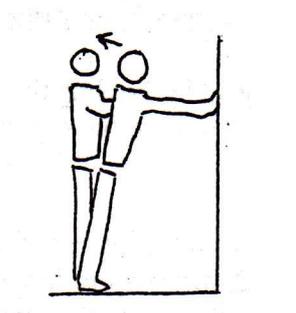
- Shrug shoulders
- Shake arms and hands down by sides
- Place palms together, fingers spread (chest height)
- Press fingers together, lift elbows up and out, push heels of hands down
- Interlace fingers and stretch arms out in front
- Rotate hands so palms face away from body – straighten elbows and stretch
- Rest hands on table – pretend piano playing to loosen fingers
- Place hands flat on the table, palms face down lift fingers individually starting with the thumb
- Touch thumb tip to individual fingers tip – eyes open. Progress to eye closed
- Let arms hang down by sides. Alternatively grip (fist) and release hands
- Shake hands and arms loosely down by sides and relax shoulders.

Hand Strengthening Exercises

Hand strengthening exercises may benefit children who have weak or immature grips on a pencil. Extension and spreading of the hand can help to build strength and stamina and may improve control of movement for fine motor work and in particular for pencil control and writing.

The following are examples of exercises which would be helpful for building hand strength. Children should shake their hands vigorously between activities.

1. Sit with the palms of hands together, fingers spread. Keeping the fingers pressed together, push the elbows out and the heels of the hands down. Repeat a few times.
2. Sit with fingers interlaced. Stretch arms out in front of the body, pushing the palms of the hands forward away from the body. Repeat a few times.
3. Stand an arm distance away from a wall, with the hands flat on it. Keeping the arms straight, use fingers to push away from the wall to get to an upright position. As the child becomes more proficient, move the feet backwards so that there is a greater angle of lean against the wall.



4. Bunny jumps. Crouch down, place hands a shoulder width apart, and kick feet in the air. Ask the children to keep their feet in the air as long as possible.
5. From a crouch position, with hands flat on the ground, try to touch a ball with the forehead without moving it. The ball is placed slightly in front of the hands. Start with a large ball, progressing to a tennis ball.
6. Cartwheels.
7. Modified crab walk.



8. Modified press up, first on the hands, then on the fingertips.



9. Modified chair dips. Kneel between two chairs, one hand on each chair. Push up with the hands to raise the body on to the toes.

10. Coffee grinder. Crouch down, with the hand used for writing on the ground to the side of the body. The child walks round the spread hand.



11. As in 10, but the free hand guides or bounces a ball as the child moves around.

12. (In pairs) Wheelbarrows. The 'barrow' keeps fingers spread wide as he or she is guided along. *This should be done for only short distances.*

13. (In pairs) Wheelbarrow wrestle. The child holding the 'barrow' tries to stand still while the 'barrow' tries to hand walk around the supporter and pull him or her off balance.

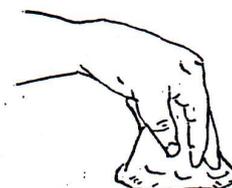
14. Two handed pushing using a board or tray. Two children face each other in a standing position, arms outstretched, hands spread, holding the board between them. By pushing the board they try to push their partners backwards.

From: Graded Activities for Children with Motor Difficulties, James P. Russell
Programme 13, Activities for the 'Writing' Hand.

Putty Program For Strengthening Hands

Gross Opposition

Shape dough into cone and stick base to a flat surface. Place fingers and thumb over the top of the cone. Stick the fingers lightly into the dough at the base. Pull up on the cone bringing the fingers and thumb together at the peak.



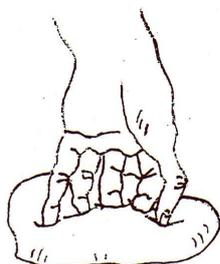
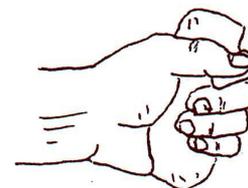
Isolated Opposition

Place ball of dough between thumb and index finger. Pinch through the ball until the fingers meet. Repeat with each of the other fingers.



Gross Finger Flexion

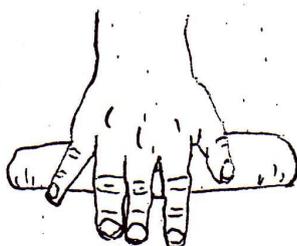
Place dough in palm of hand and curl fingers to make a fist. Squeeze as hard as possible.



Flatten a ball of dough onto the table. Start with fingers and thumb spread around the edge of the circle, then pull fingers and thumb towards each other into the middle of the circle.

Gross Finger Extension

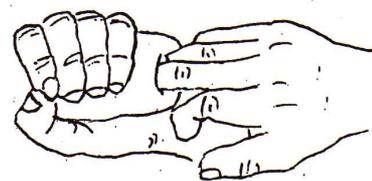
Make a flat disc of dough on the table. Keep fingers straight as you push outwards spreading dough until thin.



Roll dough out into a sausage keeping the fingers straight.

Isolated Finger Flexion

Hold dough in opposite hand. Push one finger into the dough and pull the dough into the palm of the other hand. Repeat with each of the other fingers.



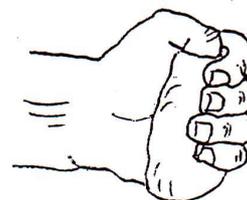
Finger Adduction

Place a piece of dough between two fingers, squeeze fingers together, try to keep fingers straight.



Thumb Extension

Shape dough into a cylinder. Rest edge of hand on the table with thumb pointing up. Press thumb deeply into the cone, then pull out again.



Advanced Putty Exercises

These exercises will strengthen the muscles of your finger, hand and forearm.

Finger Hook

Make a hook with your fingers as you press into the putty.



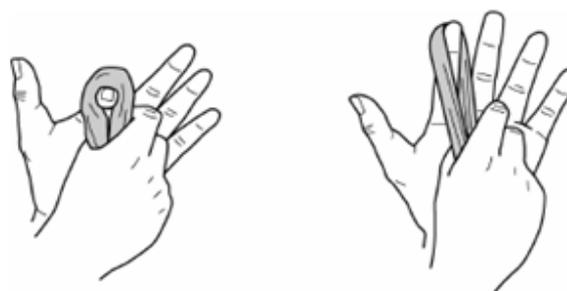
Full Grip

Squeeze your fingers into the putty like you are making a fist.



Finger Extension

Loop the putty over the end of the finger while it is bent. Try to straighten your finger.



Finger Spread

Spread the putty like a pancake over your finger and thumb. Try to spread them apart.



Finger Scissor

Place a 1 inch piece of putty between each pair of fingers and squeeze together.



Finger Pinch

Pinch the putty between each finger and the thumb.



Scissor Spread

Place the putty around two fingers at a time and try to spread them apart.



Thumb Extension

Loop the putty at the end of your thumb while it is bent. Try and straighten your thumb by pulling it upward.



Wrist Movements

The wrist positions and stabilises our hand so that we can use it appropriately during everyday activities.

The wrist moves from side to side, up (extension) and down (flexion), and also rotates between supination (palm facing up) and pronation (palm facing down).

Wrist movements start to develop during play and eating, for example, the child will rotate their wrist and forearm whilst holding something in order to see it better, or bring it to the mouth.

Early activities to encourage rotation of the wrist include the following:

- Sensory play – pouring sand, dry pasta, water, etc. into your child's palm to encourage them to rotate the wrist and 'cup' the substance.
- Playdough/plasticine – Rolling out play dough and then flattening it with the palms of the hands. This encourages the wrist to extend.
- Finger rhymes such as 'round and round the garden' to encourage your child to rotate at the wrist to allow the actions to take place on the palm.

Later activities

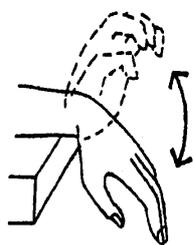
- Clapping games i.e. 'give me five.' This fun greeting encourages the child to rotate the wrist when offering the palm for 'five'.
- Drawing at an upright surface such as an easel or blackboard to encourage extension at the wrist.
- Squeezing liquid soap into the child's hands when washing hands to encourage them to cup the liquid.
- When washing hair, squeeze shampoo into the child's cupped hands.
- Cupping sweets such as Smarties in the hands before sharing out with friends.
- Opening jars and lids (squash bottles, toothpaste, etc.).
- Turning keys in a lock to open doors.
- Turning doorknobs.



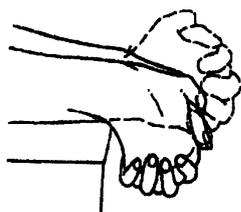
- Cooking activities, e.g., stirring cake mixture, sprinkling hundreds and thousands onto iced cakes.
- Shaking and rolling a dice during board games.
- Throwing a Frisbee.
- Tossing a bean bag from one hand to another.
- Pouring water or dried pasta between assorted shapes and sizes of container.
- Playing cards to encourage picking up and turning over of cards (e.g. Snap, Old Maid, pairs).
- Finding an item that is hidden under upturned cups or small containers.
- Playing with musical instruments such as a tambourine and drums.



Range of Movement Exercises – Wrist and Forearm



- Support the forearm on a table with the hand relaxed over the edge.
- Extend the wrist up, then relax and lower the hand back down.



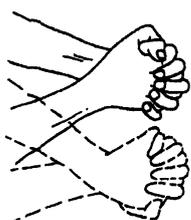
- Support your forearms on a table with your hands over the edge.
- Clasp your hands together and gently bend your wrists up and down.



- Place the palm of the hand flat on the table, holding the wrist and fingers straight.
- Bend the wrist from side to side, first towards the little finger, then towards the thumb.



- Hold your forearms horizontally in front of you and place your palms together.
- Push your palms together for approximately 5 seconds then relax.



- Support your forearms on a table and clap your hands together.
- Place the back of one hand on the table.
- Gently turn your hands to put the back of the other hand on the table. Ensure your elbows stay close into your sides.

**IF ANY OF THE EXERCISES CAUSE SEVERE PAIN OR DISCOMFORT,
DISCONTINUE AND CONTACT YOUR THERAPIST**

Bilateral Integration

These are some ideas for activities, which could be used to help encourage your child to use both hands (bilateral integration) to carry out tasks.

For most of the activities it would be preferable to seat the child at a table or with a tray in front, to focus their attention on the activity, for short periods of time. The list of activities is intended to give ideas, they do not all need to be carried out and some of them can be modified to suit your child.

- Massage your child's hands and arms to alert sensory receptors and muscles, particularly before fine motor activities. Lotion or baby oil can be used but is not necessary.
- Rolling a large ball to and from the child encouraging them to hold it with both hands and push it back.
- Holding a ball (or other large toy) above the child's head, encouraging the child to reach up with both hands to take it.
- Playing with toys which need two hands to operate them e.g. accordion, posting tube, cymbals, drum with two sticks, wind up toys, kaleidoscope.
- Playing with objects that need to be pulled apart, e.g. Unicubes, large pop apart beads, Duplo and Stickle Bricks.
- Play dough, using both hands to squeeze, roll, shape, pull apart.



- Hold large piece of play dough in one hand and pass to other hand squeezing to form a ball – continue to pass from hand to hand until a ball shape is made.
 - Take dough and roll play dough between hands to make fat sausage shape. Remember not to press hands together too hard and to keep sausage moving through palm of hands so that it is even in size.
 - Take sausage with dominant hand and take pieces off with other hand making them into 'peas'.
 - Place "peas" in a line in front of child with right hand squeeze each pea between index finger and thumb. Repeat process for left hand. Then repeat process but pinching peas simultaneously with both hands, with right hand working from right side to middle and left hand working from left side to middle.
- Taking the top off a see-through container to get at a toy, biscuit or sweet, encouraging the use of both hands.



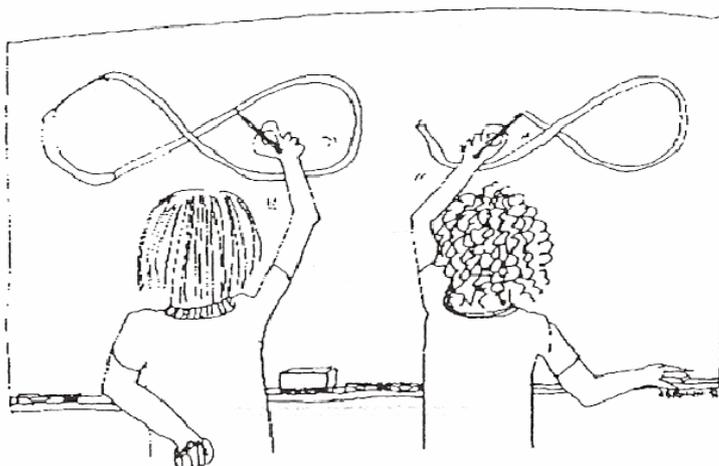
- Clapping hands and hand rhyming games e.g. Wheels on the Bus, Incy Wincy Spider, Twinkle Twinkle, Round & Round the Garden.
- Reaching into a bag using both hands to find tactile toys or toys that make sounds, e.g. bells, furry toys, smooth, rough, etc.
- Messy play using both hands, e.g. with shaving foam, rice pudding, jelly, pasta.
- Looking for toys hidden in pasta or rice (needs supervision if child tends to put things in mouth).
- Hide a scarf or hanky on one side, for example, in the child's pocket and encourage them to find it with the opposite hand.
- Encourage the child to carry heavier toys with both hands.
- Scooping, pouring, filling, emptying containers with sand or water, encouraging both hands in play.
- Putting a ribbon or yarn around the fingers of a hand and letting the child take it off with the other hand.
- Encourage the child to hold a book with one hand and turn the pages with the other.
- Paper tearing with different types of paper, e.g. newspaper, tissue paper.
- Encouraging the child to release a toy from the non-dominant hand by:
 - asking the child to 'give it to Mummy/Daddy' or to 'put it down'.
 - encouraging the child to drop the toy into a box, bag, bowl or container.
 - using shape sorter toys.

Other Bilateral Activities

- | | |
|---|---|
| <ul style="list-style-type: none"> ➤ Lego / Duplo ➤ Stickle Bricks ➤ Rainbow rings ➤ Toy workshops with nuts and bolts ➤ Snap together toys ➤ Threading cotton reels ➤ Screw toys ➤ Billie Barrels/Russian Dolls ➤ Brio / ELC train track ➤ Early 2-4 piece jigsaws | <ul style="list-style-type: none"> ➤ Toy phone with buttons ➤ Soft toy with variety of fastenings, e.g. poppers, zips, buttons and velcro etc. ➤ Wind up toys, e.g. with a key or knob to turn. ➤ Unwrapping sweets!! ➤ Open envelopes and unwrap presents! (A very festive suggestion). |
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Crossing Mid-line

Crossing the midline means that one hand spontaneously moves over to the other side of the body to work there.



Before this ability is established, you may have noticed that your young child tends to use the left hand on the left side of the body and the right hand on the right side of the body.

Why is midline crossing so important?

When your child spontaneously crosses the midline with the dominant hand, then the dominant hand is going to get the practice that it needs to develop good fine motor skills.

If your child avoids crossing the midline, then both hands will tend to get equal practice at developing skills, and your child's true handedness may be apparently delayed. So, in order for your child to do well at learning to write, there has to be a dominant, strong hand that becomes specialised at doing the job of controlling the pencil.

- "Picking apples off the tree" – reach up with one arm extended and stretch across the body, and pretend to pick an apple off the tree, keeping elbow straight. Return arm to position down at side of body and repeat with other arm. Repeat full exercise 5 times.

- “Pegs” – Place clothes pegs on a jumper/t-shirt; one on each shoulder and knee and either side of waist. Remove clothes pegs by using the opposite hand to the side of the body where the peg is placed (i.e. right hand to remove peg from left shoulder). Ensure pegs are removed using a pincer grip to squeeze the peg rather than pull it off.
- Clapping games – with partners, facing each other. Vary using different rhymes, speeds, patterns.
- Stopping a ball as it rolls down the left side of the table using right hand side and vice versa.
- “Simon Says” involving movements that encourage crossing midline.
- Hitting a ball using both hands. As the ball approaches from the side, make sure the child faces front and is crossing the midline.
- Cleaning windows, desk, blackboard.
- Drawing from left to right across blackboard, large pictures on the wall. Child keeps their body still and move their arms to draw, for example, rainbows.



- Throwing bean bags, small toys or balls into a container placed on their left side if they are throwing with the right hand or their right if throwing with left hand.

In-hand manipulation

In-hand manipulation involves manipulating an object within one hand. The fingers and thumb are used to best position the object for the activity. For example, picking up a pen and moving it into position with your fingers for writing. Some daily activities using in-hand manipulation include: positioning a pencil when drawing; adjusting the paper when cutting with scissors; doing up buttons; tying shoelaces and using a knife and fork. In-hand manipulation is one of the most complex fine motor skills.

Helpful strategies

- Show and explain to your child how to do the activity in the correct way before your child does the activity.
- Sit with your child during in-hand manipulation activities so you can give feedback to improve awareness of finger and thumb positions.
- By doing the activities in the correct way and with regular practice your child will develop his/her in-hand manipulation skills.



General activities

Encourage your child to do these activities with his/her preferred hand and use his/her thumb and index finger (and middle finger if required). Discourage your child from using her other hand, chest or the table to help.

- Place a small object between the tips of your child's finger and thumb and ask him/her to hide the object in his/her hand. Two-pence coins, buttons, marbles, dice or small pieces of food are good objects for hiding. Practice this activity with a variety of objects.



- Ask your child to pick up a small object with his/her fingers and thumb and hide it in her hand. Then while still holding the first object, encourage him/her to pick up another object with the same hand and hide it. If successful, try picking up a third object. This activity could be made more interesting by asking your child to remove coins from a purse and hide them in his/her hand.
- Encourage your child to move an object placed in the palm of his/her hand to the tips of his/her fingers and thumbs. Objects that may be useful include small pieces of food, coins, game pieces, beads for stringing. It may be easier for your child to hide the object in the palm of his/her hand first and then try to manipulate it to his/her fingertips.
- Try incorporating some of the above activities when playing board games, marble race or bead threading. For example, before moving a game piece, ask your child to hide it in his/her hand then undo a lid from a drink bottle or jar with thumb and fingers.
- Select a key, from keys on a key ring, and put it in a lock.
- Hold and adjust the paper while cutting with scissors.
- Do and undo buttons.
- Play Connect Four, however ask your child to pick up 3 counters one at a time and hold them in his/her hand.
- When it is his/her turn, ask him/her to move one counter back to his/her fingertips and place it into the frame.
- Use a dice or place a sticker on one side of a wooden cube. Encourage your child to hold the dice or cube between the tips of her fingers and thumb and turn it around and over to find “the number 6” or the sticker. Ensure your child does not use the table or other hand to help.
- Practice removing small objects from a change purse, baggie or container one at a time and hiding each within the palm. Then placing them back, one at a time.
- Place coins in a piggy bank, starting with several coins in the palm.
- String beads, holding 2 or 3 beads within the palm.
- Pegboard games, holding 2 or 3 pegs within the hand.



- Twist open or closed lids on small bottles or toothpaste tube held within the palm of the hand.
- Flip a coin from heads to tails within the fingers of one hand.
- Cut with scissors and practice adjusting the grip on the paper with the helping hand
- Practice buttoning, zipping and snapping snaps.
- Turn dice within the fingertips to see different sides.
- Hold a small cup filled with water. Practice turning it with the fingertips without spilling.
- Play with construction toys such as Duplo, Lego and K'nex.
- Place clothes pegs around an index card or paper plate: encourage using only one hand to position/reposition the card or plate.
- Craft activities that require using bottles to squeeze: glue, glitter glue, puffy paint, fabric paint, etc.
- Lacing boards, sewing cards.



Pencil Games

Encourage your child to do these activities without using his/her other hand, chest or table to help.

- Hold the pencil in the fingertips, ready for writing, then "walk" the fingers to the eraser end of the pencil, then back to the tip.
- Turn the pencil between the thumb and fingertips: try turning it like a windmill in one direction, then the other.
- Use a hand held pencil sharpener to sharpen your pencils.
- Using a pencil with a rubber on the end, encourage your child to write a letter, turn the pencil around to rub out and then turn it back for writing again.
- Place some coloured pencils on the table in front of your child. Ask your child to pick up a pencil and write the first letter of his name. Encourage him/her to use his/her preferred hand only and pick up and position the pencil for writing. Repeat using a different coloured pencil for each letter of your child's name.

Hand Dominance

When one hand is consistently used more than the other hand, and is more skilled at tasks than the other hand, then that hand is considered to be the dominant hand.

This is also referred to as **hand preference**.

If your child struggles to use both hands together well, then bilateral coordination and crossing midline activities will help develop these skills.

Once a child crosses the midline freely, hand dominance usually becomes clearer. It is never recommended to encourage a child to use one hand over the other, unless it is evident that the child consistently initiates an activity with the same hand. If this is the case, switching may occur due to fatigue. Focus on strengthening to see if the child will be able to sustain grasp to complete a task.

Activity Ideas

- Presenting things at midline and encouraging the child to finish the activity with whichever hand they started with.
- Let the child choose which hand they wish to use, a rule can be established that the hand that the child starts with is the one they have to finish with.
- Screwing lids on and off jars, screwing pipe fittings together, assembling nuts and bolts. To add interest to screwing lids off, hide small objects or stickers inside for your child to find.
- Large Lego/Duplo or other assembly toys.
- Pushing a car/train around a track. You can draw “streets” on a long piece of paper.
- Tool use such as hammering or using a screwdriver. Children’s toy workbenches are a great and safe way for children to practice their manipulative skills.
- Use of other household tools such as tongs, use of clothes pegs, watching to see which hand is more skilled.
- ‘Pick Up games’. Use coins, buttons, beans or other small items which require the use of a refined pincer grasp (holding the item between the pad of the index finger and pad of the thumb). Then try putting them into a small hole or slot (such as a money box). Alternate hands doing the task and watch the quality of movement.

- Encourage colouring on small pieces of paper. One hand has to stabilize the paper or it slips all around.
- Try to provide opportunities for your child to practice his/her ball skills. Try rolling balls, catching, tossing balls into a container. Be sure to start with a ball large enough that your child feels comfortable with and then moving to a smaller size as his/her skills progress. You may also try these activities with bean bags. In using larger balls, children learn to use their hands symmetrically, working together. Smaller balls will encourage one hand to emerge as the dominant one.
- Lacing cards, hand sewing and bead stringing encourages the use of a dominant hand. Lacing cards can be made of thin cardboard with a hole punch. Use long shoelaces, or wool with the end stiffened with tape.
- Bowling. Go to an ally or set up objects to knock over at home with a ball in a safe place.
- Let your child play with cookie cutters and clay. Also have your child pound on clay with one hand to flatten it.

Fine Motor Skills Program

The exercises given below, when practiced on a regular basis, should help to promote shoulder stability, the ability to cross midline, bilateral integration and to develop pincer/precision grip for fine motor control.

Shoulder Exercises

- **Shrug Shoulders** – raise one shoulder, then the other shoulder, then both together - 5 times. Ensure that head remains upright in mid-line throughout and that only one shoulder moves.
- **Rotate Shoulders** – make circles with one shoulder – 5 forward and 5 backwards. Repeat with other shoulder. Ensure that head remains upright in mid-line throughout.
- **Windmills** – make 5 forward and 5 backward circles in the air, first one arm and then the other arm, then both arms together, one arm following the other in a consecutive manner. Ensure that the arm is stretched above the head and the elbow remains straight, the head remaining upright and in mid-line.

Advanced Exercise

- **Shoulder Girdle Spirals** – Lift both arms to shoulder height and extend arms out to the side. Begin by making small circles with wrists then gradually make circles larger until using whole of arm (5 or more rotations). When circles are as large as possible, change direction and gradually reduce the size until only the wrist is moving. Aim to build up to 10 repetitions. This exercise is hard on the shoulders so it is important to build up slowly. Keep arms raised to shoulder height and arms extended throughout.

Crossing Mid-line Exercises/Bilateral Integration

- **“Picking apples off the tree”** – reach up with one arm extended and stretch across the body, and pretend to pick an apple off the tree, keeping elbow straight. Return arm to position down at side of body and repeat with other arm. Repeat full exercise 5 times.
- **“Pegs”** – Place clothes pegs on a jumper/t-shirt; one on each shoulder and knee and either side of waist. Remove clothes pegs by using the opposite hand to the side of the body where the peg is placed (i.e. right hand to remove peg from left shoulder). Ensure pegs are removed using a pincer grip to squeeze the peg rather than pull it off.

Advanced Exercise

- **Clapping games** – with partners, facing each other. Vary using different rhymes, speeds, patterns.

Table Top Activities

Promote good sitting posture by ensuring the child is sitting with bottom back in the chair, chair tucked in, arms resting lightly on the table top and feet placed flat on the floor.

Putty / Playdough Exercises

- **Roll a sausage** – use both hands together to gradually roll an even sized length of dough approx. 30 – 40 cms long. Ensure the body remains still, the shoulders relaxed and the arms move from shoulders.
- **Finger isolation** – isolate thumb and each individual finger consecutively to press down on the sausage of dough. First one hand then the other.
- **Opposition** – pinch/squeeze sausage between thumb and individual finger tips consecutively. One hand and then the other.
- Roll sausage into a ball on the tabletop with one hand. Pick up and squeeze as hard as possible with one hand. Roll dough into a ball between two hands and squeeze as hard as possible using the other hand.

Bilateral Integration & Fine Motor Activities

- **Unicubes** – create a tower of up to 10 cubes using the tabletop as the base and one hand to stabilise the tower. Ensure that the tower is properly aligned. Pull tower apart one cube at a time, holding the tower between both hands.
- Stack 2 towers using both hands simultaneously.
- **Paper balls** – tear paper into thin strips and scrunch into balls using fingertips. Flick balls using individual fingertips with thumb into a “goal”.
- **Paper plate and pegs** – place numbers, dots, marks around the edge of a paper plate. Use non-dominant hand to turn the plate whilst placing pegs with dominant hand. (Move plate in an anti-clockwise direction for right-handers and clockwise direction for left-handers).
- **Pegs and Pegboard** – pour a number of pegs into a small container and place in the mid-line above the pegboard. Use dominant hand to pick up pegs one at a

time and place in the board, using a mature pincer grip (thumb tip to index finger tip) and stabilising the board with the non-dominant hand. Vary the activity by placing pegs by colour/pattern sequences. Remove pegs one at a time and return to container.

- **Threading** – use buttons, beads, reels, pasta tubes. Ensure that the lace tip is appropriate for threading the chosen object, i.e. longer, stable lace tip with larger objects, ordinary shoelace tip with large holed buttons.

Advanced activity

- Use tweezers or pegs to transfer small objects (pasta, balls of crumpled paper, dried peas/beans) from one container to another.

Finale to session

- Stand up. Lift arms above head and stretch through body from toes upwards to outstretched fingers. Lower arms in front of body.
- Clap hands – 2 fast, 2 slow, 2 fast. (Vary according to level of ability)
- Stamp feet several times.

Play dough Recipe

- 1 teacup of flour
- ½ teacup salt
- 1 teacup of hot water
- 1 tablespoon cold water
- 1 tablespoon cooking oil
- 1 tablespoon cream of tartar
- Food colouring (few drops)

Mix all ingredients together in a non-stick saucepan, over a gentle heat, stirring constantly until it forms into a lump of dough. When cool enough to touch, knead dough and place in an airtight container.

