

## Pencil Skills

Pencil Skills require many different skills to be linked together. Some relate to sitting position, some to hand use and others to perception. The advice provided here covers some of these skills.

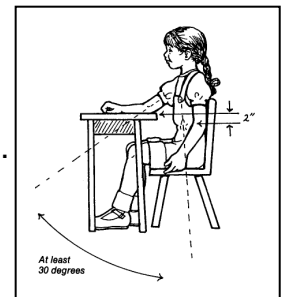
### Sitting Position for tabletop activities

A good position at the table will help the child to be stable and be able to concentrate and use their hands most effectively, but remember we all adjust our position as we work.

#### A correct sitting position allows:

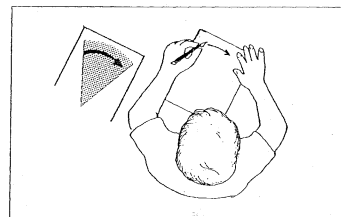
- Feet to be placed flat on the floor or on appropriate support (e.g. foot block or phone book)
- Pelvis at the back of the seat
- Hips and knees bent approximately at 90°
- Arms forward symmetrically
- Work surface high enough to stabilise the shoulders
- Non-writing hand free to assist
- A slanted work surface can help (e.g. posture pack or wide A4 Lever Arch folder or angled board available)
- Make sure the child is directly facing the board.

Keep the work surface clear from clutter to allow the working arm to move  
Ensure that the child moves the paper up as they get near the bottom of the page.



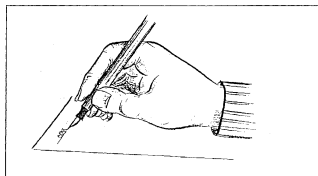
### Left Handedness

- Try not to sit a left-hander on the right of a right-hander during writing activities or their arms will bump into each other and restrict movement.
- Place paper to the left of the body midline and tilt the paper clockwise to avoid the child's hand obscuring the view of the line. It may be useful to place a tape on the table to outline where it should be positioned until the child gets used to it.



- Encourage the child to steady the paper with their right hand in the middle or towards the right edge of the paper, not under the line where they are writing.
- The left fore arm should remain parallel with the sides of the paper to prevent development of a 'hooked' hand.
- Check the child has left handed scissors for cutting.
- Left handed products and advice: [www.anythingleft-handed.co.uk](http://www.anythingleft-handed.co.uk)

Adapted with kind permission from Northumberland PCT Children's Occupational Therapy Service



### Holding a pencil

Pencil grip is a developing skill, which usually matures over time from holding in a fist to a tripod grasp. Some children find other ways of holding that whilst less conventional are still functional ie they work for that child. Consideration should be given as to the benefit or not of changing the grip that child has developed.

The most effective pencil grasp is the one shown, which allows the fingers to move without using the wrist, or whole arm. This means that less effort is used and writing can be more fluent. The forearm should be resting on the desk for stability.

### Pincer grip

This is the ability to grasp small objects with thumb and forefinger. It is an important part of the child's fine motor development, and necessary for holding and manipulating a pencil. Try the following:

- Encourage the child to pick up small objects (toys, sweets etc.) with their thumb and first finger rather than her whole hand, or thumb and middle finger.
- Encourage the child to form these fingers into a 'beak' and pretend they are a bird picking up seed to encourage and promote the idea of tucking the other fingers away.
- Clothes pegs opened with the thumb and index finger help to strengthen pincer grip e.g. placing pegs on the edge of a plastic tub to make "a cage for an animal".
- Use tweezers to pick up small items such as sorting Hamma beads or the game Operation
- Making play dough into small shapes, pinching a play dough sausage with thumb and first finger and flattening play dough balls into pancakes.
- Pick small items e.g. buttons, beads out of play dough with the thumb and index finger.
- Pop bubble wrap with index finger and thumb.
- While doing pincer grip activities place a small object (e.g. pencil grip / piece of play dough / a rubber) in the child's palm to be held in place by the middle, index and little finger. This will help with only using thumb and first finger.

### Tripod Pencil Grasp

To encourage the development of a tripod pencil grasp try the following:

- Use short (1"), wide pencils/crayons/chalk to encourage the child to hold the pencil correctly.
- Encourage the child to hold the pencil between the thumb pad and index finger pad (like a bird beak). The pencil then rests on the middle finger.
- Put a sticker or band around pencil to show to hold it near the tip.
- Place a grip on the pencil to encourage a dynamic tripod grip (introduce use slowly), or try using a triangular pencil. A 'Handiwriter' pencil grip encourages the correct hand position during handwriting, available at [www.taskmasteronline.co.uk](http://www.taskmasteronline.co.uk)
- Try using writing implements of different shapes, thickness, lengths, flow. E.g. crayons, felt tips, Etch-a-sketch, chalk, paint
- Name the fingers: Thumb is the "Dad", index finger is the "Mum", remaining fingers are the child, brothers or sisters, friends or pets. ( Use driver and passenger names to suit ) Say the pencil is the car, just like in a real car, For safe driving Dad and Mum face forward (towards the point of the pencil) Dad shouldn't sit on Mum's lap (thumb on top of index finger) and Mum shouldn't sit on Dad's Lap (index finger on top of thumb) If children use an overlapping or tucked-in thumb, remind them that no one can sit on anyone's lap while driving!



### Using the Senses in letter formation

Letter formation is part of the development of fluent handwriting and forms the foundation for joining letters in the later school years. It needs to become automatic so the child can concentrate on the content of their writing rather than how to write the letters. Lots of practice is the best way to help letter formation become automatic.

#### The senses that can be used in learning to write are:

- **Tactile** ie. Sensation of touch
- **Visual** ie. Seeing
- **Gustatory** ie. Smelling
- **Auditory** ie hearing
- **Kinaesthetic** ie. Sensation of movement (proprioception)

Start by focussing on the basic shapes:

I – O / \ + X

#### Tactile Activities

- Draw letters with the index finger in sand, paint or shaving foam
- Practise writing letters in the air
- Trace letters or simple pre-writing shapes on child's back and let them guess the letter you have drawn
- Practise writing the letters with their eyes shut as well as open
- Write on paper that is hanging on the wall and develop whole arm movements to formulate a pattern
- Draw using crayons, chalk, pencils and pens and focus on the different feels of the writing when doing it
- Use chalks to draw on the pavement

#### Visual Activities

- Writing on coloured paper or black paper using silver or gel pens
- Use aluminium foil to write on or construct the shapes or letters
- Use different types of paper
- Use special painting books where with a wet finger the colour appears by magic
- Rainbow letters onto a piece of paper or chalkboard. Using a variety of colours draw the large letter and then copy over it and make a rainbow

#### Smell Activities

- Writing with scented markers
- Add scented oil or essences to finger paints to make it smell
- Use scented lotion for finger painting

#### Proprioceptive Activities

These activities would stimulate the joint muscles and provide feedback to your child's brain regarding the movement they are making. They incorporate weight or resistance to the movement.

- Use a weighted brush to paint with or a heavy pencil
- Use a rolled up magazine as a wand to draw the letter in the air using both hands
- Use a wobbling pen that is available from [www.specialdirect.com](http://www.specialdirect.com)
- Draw on paper placed over sand paper or a textured surface to give a 'bumpy' feeling about how the pencil is moving.



### Forming Letters

Letter formation is part of the development of fluent handwriting and forms the foundation for joining letters in the later school years. It needs to become automatic so the child can concentrate on the content of their writing rather than how to write the letters. Lots of practice is the best way to help letter formation become automatic.

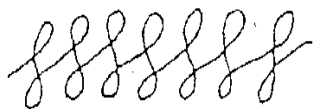
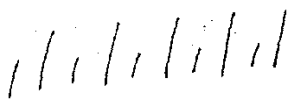
### Letter Families and orientation

- All letters have a starting point and a direction. Discuss these with your child as they learn each letter (e.g. it starts at the top, goes down and stops; round and up and down and stop). It can sometimes help the child to tell you what they are doing as they do it to provide auditory feedback too.
- It is easier to teach the letters family by family. Each family is made up of letters with similar movements and directions so it will make it easier for your child to learn how the letters are formed. Try teaching them in the following order to make it easier for your child:
  - Stick Family – i,l,t,f,x,z
  - Curvy Family – v,u,w,y,j
  - Clockwise Family – b,h,p,k,n,m,r
  - Anti-clockwise Family – a,d,q,g,o,c,e,s
- Use odd one out games to help the child to determine discrepancies in orientation.
- Write letters in the air using whole arm movements with eyes closed to reinforce kinaesthetic appreciation of letter orientation.

### Developing Pencil Control and Fluency

Practise with activities such as can be found in children's activity books:

- Dot to Dots, Mazes
- Matching one object to another (e.g. drawing a line across the page to match the animal with its home)  
You can use tasks relating to the curriculum you are working on such as matching sounds or numbers of objects
- Drawing along roads/pencil pathways (start with wide lines, moving to narrower and more wavy "roads")  
Also good for fluency are trying to make a snail or tornado – going round and round but keeping wrist on the table and moving only the finger and practising letter patterns (it is easier to start large and then get smaller).  
These patterns can be used to make up pictures e.g. with fences, sheep, waves, ice cream.





### Getting the spacing right

Children who struggle to judge distances and assess space will not only affect gross motor skills, but will also have a bearing on handwriting. Spaces between words may be omitted or placed erratically. This results in text becoming increasingly illegible. It is therefore crucial to teach the child how to provide adequate space between words and to space letters appropriately.

### Judging spatial orientation including word spacing

- Play games which involve judging distances, ie, obstacle courses.
- Use board games which involve spatial organisation such as Connect 4, peg board patterns etc.
- Play 'How many steps?' standing with the child, ask, 'How many steps will it take you to reach that chair?' The child then guesses. They are then encouraged to take those steps and monitor their own movement. Initially the child may grossly under or over-estimate the distance, but with time the estimations gradually become more accurate
- Encourage the child to leave a finger space between the words. One and two finger spacers are available from [www.specialdirect.com](http://www.specialdirect.com)
- You could get the child to put a small sticker between the words.
- Use an ice cream stick between each word – the child could decorate and individualise the stick.
- Get the child to try and read a sentence where there are no spaces left between the words to show why spaces are needed.
- When the child has completed a body of work, get them to look through and mark where they could have used more space between words.
- Practise writing on grid paper, placing each letter in a square and a space between each word.
- Introduce joined writing very early in the child's education, this is guaranteed to improve spatial organisation

### Writing on the line

- Mark a margin at the left hand side in a clear colour or place starting points at the left margin to reiterate where each line of writing should start.
- Use visual and verbal cues e.g. coloured lines to encourage the child to place the letter in the correct place



- Blue line symbolises sky, green for grass, and brown for earth, e.g. for a 'p' start at the grass, go down to the earth and back up to the grass
- This should give the idea of spacing and size of letters.
- As the child improves you can just put coloured dots at the start of the lines. Always use lined paper rather than a line guide which easily moves.
- Eventually s/he may only need one thick straight line margin for a visual cue: e.g. \_\_\_\_\_
- If this is difficult use wood or clear glue to make a line as a guide. The glue will provide a raised surface to give sensory feedback and help to write on a line. The Raised Ruled pad from [www.specialdirect.com](http://www.specialdirect.com) will also provide sensory feedback.
- If the child is also having problems with forming the letters correctly it may be hard for them also to think about where the letter should be placed. You could use pictures to make learning more fun e.g. drawing the car or train wheels along the track / road or drawing stalks from the flowers to the soil.



### “Warming up” for Handwriting and getting the writing pressure right

Touch and joint sense in the hands and fingers are important senses to develop when it comes to handwriting. Weight bearing activities will help to improve your child’s awareness of their arms, hands and fingers so that they can become more aware of the difference between heavy and light pressure when writing.

#### Getting arms ready

- Regularly undertake exercises whereby pressure is placed through the upper limbs, ie crawling games, wheelbarrows, animal walks etc. these should ideally be incorporated into a daily schedule.
- “Pushing”: place hands on chair, wall or table to do “push-ups”
- “Popcorn ride”: Bounce your body up and down whilst sitting on your chair. Try 15 bounces.
- “Pulling”: Clasp hands together palms up, pull hands apart, keeping forearms horizontal and close to the chest (but not resting on the chest).



- “Praying”: push palms and fingers together, keeping forearms horizontal and close to chest.

#### Getting hands and fingers ready

- “Magic writing gloves”: Firmly but gently rub along the fingers e.g. put on/take off “magic writing gloves”.
- “Piano”: use both hands, tap fingertips on table and/or imitate sequence
- “Spider Push-ups”: use both hands, spread fingers apart and match thumb and fingertips together, then “push” in and out.
- “Pencil roll”: Place your palm face up with your pencil on it. Roll your pencil from your palm into your fingertips using fingers and wrist only repeat 10 times.
- “Pencil pickup”: Put your pencil down facing to the right; pick it up ready to write; put it down facing left; pick it up ready to write; Don’t forget only use 1 hand – try this 3 times to each side.
- “Pencil Push Ups”: Hold onto the pencil as if you were going to write – using your fingers only “walk” up the pencil to the top and back down again.
- “Finger Pull”: Make a circle with your thumb and fingertips, have your partner do the same. Link your circles – now trying to pull your partner’s circle apart.

#### Pressing too hard on the pencil

Heavy pressure can slow writing significantly. The following will help your child to monitor the pressure they are using:

- Provide a light-up pen which can be bought cheaply from stationery shops. Challenge the child to write so that the light does not come on.
- Play a game of MI5; provide a pad created by placing a layer of paper alternately with carbon paper. Ask the child to write a secret message so that only one agent can read it. Initially the pressure may make the child write so that the message can be seen on 3 or 4 copies, but by encouraging the child to self-monitor, pressure will reduce. This can also be used for too soft pressure as the image

#### Pressing too softly

- Use crayon rubbings - If too little pressure is used, the image does not come through clearly onto paper. After achieving the ‘perfect’ pressure when watching, ask the child to maintain the same pressure with eyes closed.
- Use carbon paper to see if the child get make a copy through the paper.
- Try using a softer pencil; any artist’s supply store sells pencils in a range of graphite density. The softer leads are B and the harder are H.
- Use a light up pen asking your child to try to write without letting the light go off.

#### Pressing too hard or holding too tight may cause the hand to ache. Try

- Having short breaks in long periods of writing and stretching or shaking the hand to relax it
- Pens or pencils with a thicker barrel will help

## Recommended Resources

Many resources for handwriting can be found at: [www.specialdirect.com](http://www.specialdirect.com)

- Raised Ruling Pads
- Pencil grips
- Yoropen
- Handwriter pencil grip
- Mi5 carbon paper
- Writing slopes ( also available from Back in Action [Back in Action](#))

Handwriting **Without Tears** - multi sensory programme to help with learning letter and number formation. [Handwriting Without Tears](#)

Teodorescu Perceptuo-Motor Programme – Write from the Start Helps develop fine motor and perceptual skills for effective handwriting. Lois Addy and Teodorescu (1998). Learning Development Aids, ISBN 9781855032453. [Write from the start](#)

Speed up a kinaesthetic programme to develop fluent handwriting for age approx 8-13yrs Lois Addy (2004) ISBN: 9781855033863 [Speed Up!](#)