

Handwriting

Some children and young people may experience difficulties with handwriting. It is a complex task which requires multiple skills including:

- Motor (movement) skills eg sitting posture, upper body stability, pencil control
- Hand-eye coordination (visual motor skills)
- Visual perception (being able to interpret what we see to form shapes, numbers and letters)
- Cognition and language skills
- Attention

A child may have difficulty with:

- Sitting upright when writing
- Using a pen or pencil with a good grasp and applying the right level of pressure on the paper
- Forming letters and spacing them correctly
- Doing longer pieces of writing

How you can help

Sitting posture

- Sitting in a good, comfortable position with a stable base will help the child to concentrate and be able to control their pencil.
- Make sure the size of the chair and table is suitable for the child's height; the table should be at just below "resting elbow" level with forearms resting comfortably on the tabletop.
- Make sure they are sitting upright with their bottom against the back of the chair, and hips and knees at 90 degrees angle with the chair tucked well in under the tabletop.
- Feet should be flat on the floor. Use a footrest if their feet don't touch the floor.



Shoulder strength and stability are also important for improving hand function. Some activities to help with this include wall and chair push-ups, or lifting a big ball overhead and throwing at a target. At home, you can encourage your child to do activities that involve reaching above head height such as hanging up washing, arranging bookshelves, drawing or writing on vertical surfaces such as an easel or big paper taped on a wall.

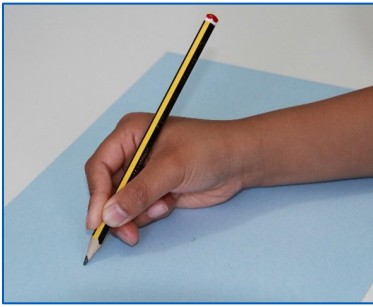
If the child has poor core strength, follow the [core strengthening exercises on our website](#).

[A wedge move 'n sit cushion](#) may help if the child often slouches or slumps when writing. You can also try getting them to use an angled writing slope or an A4 ring binder with a matt surface to help create a more upright posture.

Pencil grasp

Having a good pencil grasp helps the child to hold and move the pencil easily, with comfort, which will help them to make their writing easier to read. An inefficient grasp limits the movement of the pencil, making it hard for the child to write neatly, complete written work on time, and can cause tiredness and discomfort.

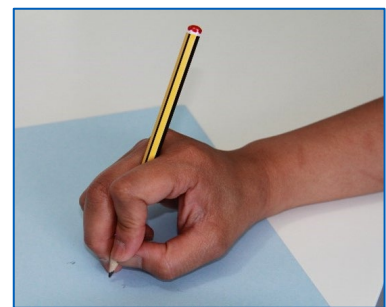
A functional grasp doesn't need to be a perfect tripod grasp, it just needs to be efficient for writing. The photos below are examples of a functional grip.



Tripod grasp



Quadrupod (four finger) grasp



Adapted tripod grasp: pencil is held between index and middle fingers supported by the thumb

Ways to encourage a functional grasp

- Consider quadrupod (four finger) grasp for children with flexible finger joints (joint laxity).
- Use short pieces of chalk/crayons (approx. 2cm) to colour, draw or practice writing letters.
- Complete some fine motor activities such as threading/sewing, posting coins, completing pegboards, using tweezers, Lego, etc.
- Practice drawing, writing or painting using a vertical surface (eg whiteboard, chalkboard, paper taped to wall) to encourage a good wrist position.
- Make sure the child's wrist is resting on the table when writing. If they bend their wrist when writing, you can try a **Handiwriter** (see image to the left) to promote a good stable wrist position.
- Try different types and sizes of pencils, pens and pencil grips to help the child hold the pencil effectively. Some children work better with roller pens or pencils with indents for fingers and others with fountain pens.



It's often a case of trial and error. Try the pen for a couple of weeks before trying another.

- Here are some pens and pencils you can try: [Stabilo EASYergo learning pencil](#), [Stabilo EASYoriginal rollerball](#), [cross-guard pencil grips](#), [Ultra pencil grips](#), [Wishbone grip Penagain pen](#).

Placement of letters / Letter formation

Here are some strategies you can try with your child to help with correct letter formation, good alignment of letters and consistent spacing.

- Be consistent with the style of writing. Decide whether to use print or cursive, considering the child's preference and the legibility of their writing.

The stages of teaching letter formation are:

1. Imitation – an adult demonstrates how to write the letter and the child imitates.
 2. Copying – the child copies a letter which is already written.
 3. Independent letter formation without copying.
- Teach the child to form letters in specific letter groups. This will help them remember the movement patterns of similar letter formation. For example:
 - curly letters = c, a, o, d, g, q, s
 - diver letters = r, m, n, h, b, p
 - diagonal letters = v, z, w, x, y, k.
 - There are a few strategies that you can implement to help correct letter reversals:
 - Teach writing letters in groups of similar formation.
 - Use consistent verbal cues when teaching letter formation. For example, for the letter b, “straight line down, circle around”.
 - Practise ‘b’ and ‘d’ by asking them to hold their thumbs up and make two fists. The left hand forms a “b” and the right hand forms a “d”.
 - Develop a personalised cue card with the common reversals for your child to use at home and at school.
 - Give the child an alphabet sheet or flash card as a visual prompt to help them with independent letter formation.
 - Write on lined handwriting paper, and make the line bolder as a prompt.
 - Highlight the left margin of the page to help the child remember where to start writing.
 - Create a ‘spacebar’ using 1-2 cm wide cardboard. Encourage the child to use this after every word to keep spacing a consistent size. They can also use the spacebar to check for immediate feedback.
 - Encourage the child to leave an exaggerated large space between each word, or use coloured stickers in place of the spaces to increase their awareness.
 - It is important to first work on the quality of writing, eg correct letter formation, consistent letter sizing, before focusing on the speed of writing. Allow extra time for writing if needed.
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Paper positioning

Think about the positioning of the paper to make writing more comfortable.

- If the child is right handed, angle the paper slightly to the left
- If the child is left handed, angle the paper slightly to the right
- Encourage the use of the other hand to hold the paper still when writing. And give reminders or print a visual prompt to put on their desk.

Pencil pressure

Some children may have difficulty knowing how much pressure to apply on the paper. They may apply too much force, causing pain and tiredness in the hands so it may take them longer to write. Or they may not apply enough force, making it hard to read their writing.

To help improve their pencil pressure, encourage some activities that involve pushing, pulling and pinching. This will also give sensory feedback to the muscles and joints, which can help them to gauge the correct amount of force they need to use.

If a child uses too much force:

- Try a weighted pen or pencil so that they can feel more pressure on the paper
- Use a retractable pencil as the lead will snap if too much pressure is applied

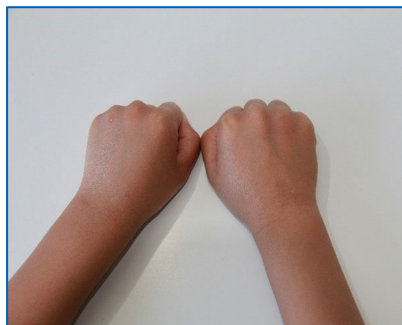
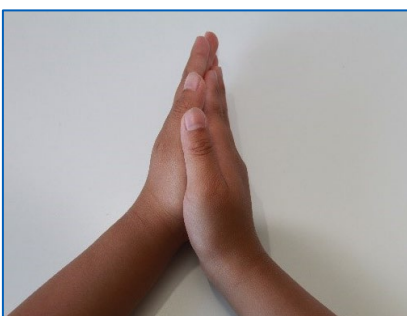
If a child uses too little force:

- Use softer leaded pencils so that writing appears darker
- Ask the child to write a word very lightly on the paper and erase it without leaving marks

Hand warm up exercises

These hand exercises can be used by the child before writing or doing other fine motor activities such as cutting or drawing, to prepare the muscles of their hands. It can also help reduce pain or fatigue when writing.

- Start by rubbing the palms of the hands together briskly
- Wring the hands as if it's a really cold day
- Make a tight fist with both hands then stretch the fingers wide
- Repeat this 5-10 times



- Press the hands together in a praying position with palms flat and elbows away from the sides. Repeat this 5-10 times



- Hook the fingers of both hands together and pull the hands in opposite directions from each other away from the body. Repeat 5-10 times.

- Place both palms flat on the table then lift one finger at a time or lift the same fingers on both hands at the same time. They can also pretend to play the piano with both hands, which will help with individual finger movements.

Theraputty exercises

Theraputty comes in various resistance or strengths, ranging from extra soft to hard. This can help to strengthen the muscles and provide sensory feedback to the hands.

- Start with extra soft or soft theraputty and gradually move to the next strength when the child finds it easy to use. The colour and resistance can be different depending on the supplier.
- When using theraputty, make sure it is on a smooth flat surface, preferably a table.
- Keep the theraputty in its container after use.

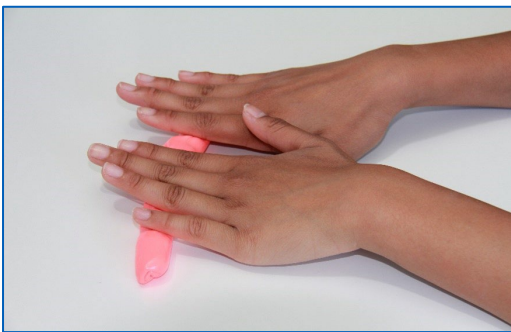


- Roll the theraputty into a big ball
- Squeeze and knead it using alternate hands

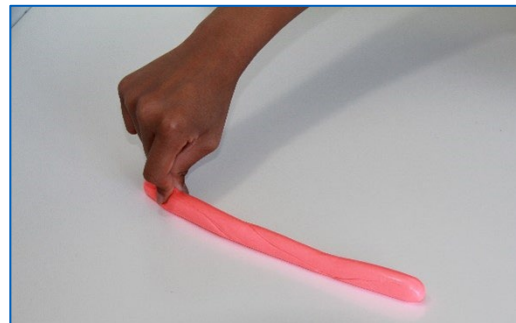
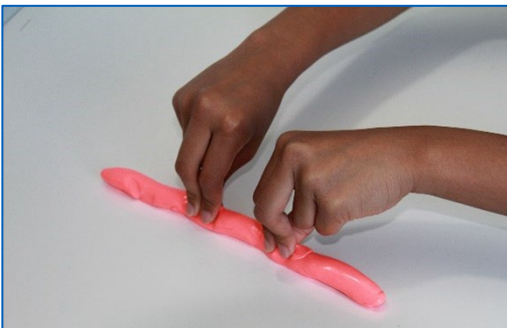
- Shape the putty into a pancake and stick it on the table.
- Place your fingertips and thumb lightly on the edges of the pancake, and pull your fingers in towards the centre



- Keep the fingers straight while using the palms to roll the theraputty into a tube shape.



- Pinch the putty with the thumb, index finger and middle finger to form small peaks.



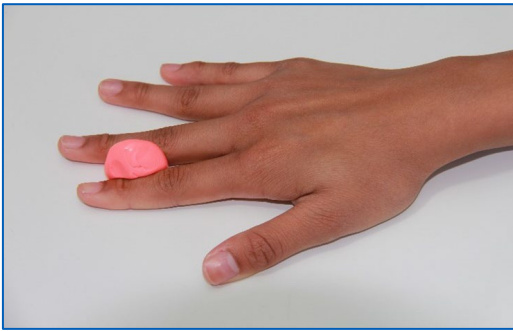
- Roll the theraputty into a cylinder and rest it in the palm of the hand.
- Push the thumb into the putty.
- Reshape it and repeat.



- Hold the bulk of theraputty in one hand.
- Pinch off small pieces using the thumb and index finger. Roll these into small pieces.
- Gather the small pieces together and when they are all pinched off, remould the ball.



- Roll out a small ball of putty and place between two spread fingers.
- Using a scissor-like motion, tr bringing the two fingers together. Repeat between different pairs of fingers until they have all been exercised.



Alternative options to handwriting

Handwriting should not be discouraged as it is an important skill to learn. But for some children and young people it can help to find alternatives, especially if it is stopping them from achieving their academic potential or impacting their confidence. Here are some things you can try:

- Typing on a keyboard- there are free online touch-typing courses are available online, check out [BBC Dancemat](#).
- Dictation using a device
- Having the child record some of their work verbally while an adult writes it for them.
- Using a Clicker (a child-friendly word processor).
- Using diagrams and mind maps where possible.
- Getting them to write key points only when taking notes, and request print outs or copies in a bigger font.
- Using answer sheets where the gaps need to be filled in.

