

Children's Early Years Occupational Therapy Service



Fine Motor Activities Advice for Parents/Carer's/Education Services

Introduction to Fine motor Skills

What are fine motor skills?

Fine motor skills are the ability to make controlled, precise and efficient movements using the small muscles in our hands and wrists. These movements come so naturally to most people that we usually don't think about them but we use them every day for almost every daily task we complete. Fine motor skills involve the coordinated efforts of the brain and muscles and therefore this is a skill we begin to build from the day we are born.

Fine motor skills examples include: grasping to pick up small toys, lego, beads or objects; buttoning and zipping clothes, laces on shoes; holding and controlling scissors to cut out; managing to manipulate pencils and pens for colouring within the lines; self-feeding through hands or later with cutlery.

NB: Ability in these skills will differ with age/ developmental stages.

Why are fine motor skills important?

Children use fine motor skills to complete almost all of their play, self-care, social and school related tasks. They support children perform tasks such as feeding themselves, grasping toys, buttoning and zipping clothes, writing, drawing, and more. The ability to complete self-care, educational and other everyday tasks helps a child's self-esteem and confidence to increase as well as encourage independence.

Developing fine motor skills in early childhood is vital, as it builds the foundation for important future skills like writing and self-care: for example we cannot expect children to be able to write if they haven't yet developed the strength needed in their hands and fingers to grasp a pen correctly and we cannot expect a child to be able to dress themselves if they cannot manipulate buttons or zips. Therefore, fine motor skills should be encouraged in our children through opportunities of play that are fun and interactive for your child.

How to use this activity pack

In order to support fine motor development in our children it is important to start with activities that are designed to encourage specific skill acquisition whilst also remaining engaging and fun. To help you, the Wirral Occupational Therapy Service have put together this pack of fine motor activities to guide parents/carers and other adults in this area.

Fine motor skills gradually build and develop in children as they practice and become more adept at activities to help strengthen their muscles and increase fine motor coordination. Make sure you keep the fine motor activities fun and don't be afraid to challenge and increase the difficulty as the child's skill grows (this is called grading an activity).

Also, don't forget positive feedback helps children to grow in confidence so give lots of praise and guidance where needed. The skills of each child will vary so start with task you know they can do with ease to build this confidence

What are we working on?

Before we get going, it's important to know some actions and specific skills we are trying to encourage with these activities.

Please be aware that all children develop at different stages and according to their individual health abilities. Encouraging a skill that the child is not developmentally ready for can do more harm than good: they may end up compensating and developing altered patterns of movement, avoidance of tasks, increased frustration and reduced self-esteem.

This booklet gives examples of activities which will encourage development but please note it is important for the child to be working through the activities at whichever developmental stage is appropriate for them. For example, with grip: we would expect to see a child using a five finger grasp before being able to manage a palmer grip, then a tripod grip, which would then develop to a pincer grip (with other minor variations in between these stages).

By exploring their environment, children learn where and how their fingers are moving in space (body awareness, proprioception). They also develop tactile awareness (sense of touch which allows us to register heat & cold, pain and textures etc.) Children need to develop hand strength as well as the ability to visually judge the size, shape and distance from the body of an object they want to work with (visual spatial perception). They also have to be able to organise, plan and carry out a sequence of unfamiliar motor tasks in order to undertake many fine motor activities e.g. writing, playing games and dressing (motor planning). The development of bilateral skills (co-ordinating the two sides of the body) and hand dominance are particularly important when carrying out fine motor tasks. With experience children progress from using a basic Palmar Grip (below) to being able to release an object from their grasp (gross release). This skill is slowly refined through play and allows them to carry out activities such as stacking building blocks, putting objects into

To help guide you, here are some of the terms/skills we use in this pack and their descriptions. Each activity will tell you what specific skill/s we are working on.

Skill description table

Specific Skill	Description
Five finger grasp	Picking up a small object using the whole hand in a crane type action.
Palmer Grip	The object/ crayon/ pencil is held across the palm of the hand and the fingers are wrapped around touching the palm.
Tripod grip	Using the thumb, first finger and second finger to grasp an object/ hold the object/ crayon/ pencil.
Pincer grip	Using the thumb and first finger to pick up a small object/ hold a crayon/ pencil.
In-hand manipulation	The ability to turn/manipulate an object in the palm of the hand. This allows a child to turn an object around and place it down with accuracy, such as a coin, peg or button.
Pronation and Supination	Turning the palm, wrist and forearm down (pronation), turning the palm, wrist and forearm up (supination).
Finger isolation	The ability isolate and move each finger, one at a time/ using one finger to perform a task. Finger isolation often refers to using the index finger independently from the rest of the hand.
Thumb and finger strength	If children don't develop strength in their thumbs and fingers then they may have difficulty holding and gripping objects appropriately or may begin to hold them awkwardly, limiting speed and efficiency.
Bilateral Integration	The ability to co-ordinate and use both your left and right hands together. Many childhood activities of play, self-care and productivity require the child to use both hands together efficiently. For example, holding paper still in one hand, whilst cutting with the other.
Control of force/power	Being able to generate just the right amount of force, being not too much or not too weak to complete the activity

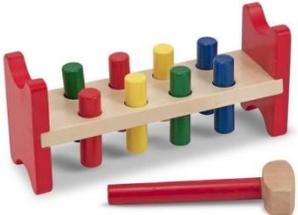
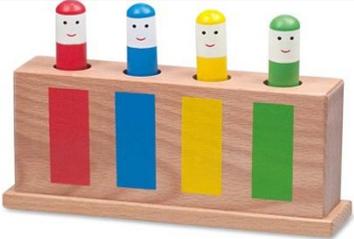
Fine Motor ideas list

Activity	Description	Movements encouraged
Coin/Lid posting	Easy to make with a shoe box the child picks up different weighted coins or buttons and posts them. Difficulty can be increased by timing the child and encouraging them to work quickly and efficiently. Try to encourage a pincer grip (thumb and index finger) to pick up the coins.	<ul style="list-style-type: none"> -Pincer grip. -Awareness of force required. -Hand eye coordination. -In-hand manipulation -Pronation/ supination.
Ball rolling	Use tape to make a simple path on a table with a white board pen. The child must roll the ball using their hand along the path. Start with a simple path first and use ball slightly larger than a tennis ball if you can.	<ul style="list-style-type: none"> -Pronation/ supination. -Elbow extension. -Wrist extension/ flexion. -Control of fine movements.
Finger/hand painting	Using fingers/ hands in paint to make creative art.	<ul style="list-style-type: none"> -Sensation of textures. -Wrist extension and flexion. -Finger isolation.
Sponge prints/painting	Same as above but use utensils to paint or make patterns with including large sponges.	<ul style="list-style-type: none"> -Whole hand grasp/ tripod/ pincer grip -Force of movement/ grip -Pronation/supination -Palmer/ finger/ thumb strength. -Wrist movement.
Feely bags	Picking out items in a bag. Could fill the bag with small beads and child must pick out large Duplo blocks for example. Use large items to prevent child becoming frustrated, and then grade to smaller items as they become more proficient in this.	<ul style="list-style-type: none"> -Grasp/ tripod/ pincer grip -Sensation of different textures. -Finger isolation.
Sandpit Play	Another great task for arm control, sensation and grasp. Bury items in the sand for the child to find such as toys, or Duplo blocks, or encourage them to use a small spade to fill a bucket with sand.	<ul style="list-style-type: none"> -Whole hand grasp/ tripod/ pincer grip. -Pronation/ supination. -Elbow extension and flexion. -Sensation of textures.

Activity	Description	Movements encouraged
Threading pasta/ beads onto string/ lace or pipe cleaner.	Encourage the child to grasp the string/ pipe cleaner with one hand and thread the beads/ pasta with the other. Use larger beads or pasta at this age to support grasp and guidance is likely to be required.	<ul style="list-style-type: none"> -Whole hand/ tripod/ pincer grip. -Grasp strength -Thumb and finger strength -Bilateral integration -Pronation/supination -Hand- eye coordination.
Finger Puppets	Individual small puppets which sit on each individual finger. Can be great for imaginative play.	<ul style="list-style-type: none"> -Isolation/ coordination of fingers.
Duplo Bricks	Build a tower, house or design of the child liking and then it pull apart. Picking up and manipulating individual pieces supports many areas of fine motor development. Aim to use duplo or larger bricks at this age	<ul style="list-style-type: none"> -Whole hand grasp/ tripod/ pincer grip. -Pronation/ supination. -Manipulation through finger movement to turn brick in hand. - Grip/ thumb/ finger strength and force in putting bricks together and pulling apart. -Bilateral integration between hands, passing from hand to hand and holding to build.
Play- Doh Activities	Using tools and doh, kneading, rolling, squeezing, placing doh on doh for example. Great for hand strength and sensation of textures	<ul style="list-style-type: none"> -Thumb and finger strength. -Wrist and palmer strength. -Wrist extension and flexion. -Manipulation of tools to gain effect. -Whole hand/ tripod/ pincer grip. -Bilateral integration. -Sensation of textures.
Wooden Puzzles	Great for manipulation, problem solving and grasp. Puzzles are available in a variety of themes to meet all children's needs. Advise starting with 4 piece puzzles first.	<ul style="list-style-type: none"> -Grasp/ tripod/ pincer grip. -In-hand manipulation -Pronation/ Supination.

Activity	Description	Movements encouraged
Bubble Wrap in different sizes.	Pop bubbles by placing the thumb underneath and index/ middle fingers on top, or vice versa. Use each finger in turn. Try popping bubbles with both hands together.	<ul style="list-style-type: none"> -Pincer grip/ tripod grip/ whole hand grasp. - Strength in thumb/ fingers. -Finger isolation. - Identifying force required in tasks.
Drawing with crayons	Encourages children to grasp, use, manipulate and control a pen or crayon. Children will initially use a 'palmer' moving to a 'digital pronate grasp' during this. Try to encourage a form of colouring in the lines to increase accuracy and the end product.	<ul style="list-style-type: none"> -Finger/ thumb strength. -Pronation/ Supination. -Pen grasp -Accuracy
Lacing boards/ card/ felt.	Pull the lace through the holes to make a pretty pattern. Start with larger lace (not shoe lace as too small) and easy designs. Can find these on the internet or in toy shops at a cheap price.	<ul style="list-style-type: none"> -Grasp/ tripod/ pincer grip. -Wrist flexion/ extension. -Pronation/ supination. -Hand eye co-ordination -Bilateral coordination.
Building Blocks	Great for stacking, making houses and towers. Children learn about gravity and how it affects the world around them using items such as this.	<ul style="list-style-type: none"> -Grasp -Bilateral integration
Bubbles	Easy to get hold of and fun to use. Encourage children to pop them with their whole hand to start with and then their index finger as they improve. Can also bring in a tool for them to poke the bubbles with.	<ul style="list-style-type: none"> -Finger isolation -Hand eye Coordination. -Elbow flexion/ extension. -Force of movement.
Squeezing out sponges	Fill a bucket with water and encourage the child to dunk the sponge in one bucket and squeeze it out in another to fill it as quickly as possible.	<ul style="list-style-type: none"> -Bilateral integration -Palmer/ finger/ thumb strength. -Pronation/ supination -Grasp/ grip.

Developmental toys to encourage/enhance fine motor development

Toy		Description
Pop-up and play toys		<p>Increasing cause and effect play as each pop-up requires a different action. Also increase finger isolation, finger strength and the start of introducing colours and animal noises into play via instruction (what sound does a tiger make etc). If a child is unable to use their effected arm to press the button, then encourage them to the effected arm to close the lid of the toy after each pop up</p> <p>https://www.argos.co.uk/product/6127059</p>
Hammer blocks		<p>Hand-eye co-ordination, grasp, cause and effect learning as well as improving shoulder strength and power. Hammer based toys can be fun and very beneficial for all types of little ones no matter their individual needs.</p> <p>https://www.bigjigstoys.co.uk/first-hammer-bench</p>
Spring fingers		<p>Promotes finger isolation, cause and effect, colour matching and grading/using power. Children often need hand over hand support initially to understand this toy.</p> <p>https://www.galttoys.com/pop-up-toy.html</p>
Basic shape puzzle boards		<p>Ideal for children with difficulties in upper limb co-ordination, strength and manipulation as well as a good starting place before moving on to puzzle boards.</p> <p>https://www.bigjigstoys.co.uk/shape-matching-board</p>

<p>Wooden Puzzle Boards</p>		<p>Helps improve complex object/shape recognition, matching and manipulation of objects to fit the board. The natural progression from shape boards like the one above.</p> <p>https://www.bigjigstoys.co.uk/my-first-peg-puzzle-safari</p>
<p>Piggy Bank/coin posting</p>		<p>Encouraging pincer or tripod grasp, in-hand manipulation, cause and effect as well as counting and following colours this toy can offer a lot in terms of development. For children whose effected arm limits grasp of small objects such as coins, encourage them to use their effected arm to stabilise or hold the toy steady whilst posting with the other hand</p> <p>https://www.argos.co.uk/product/9223792</p>
<p>Basic shape sorters with noise maker (Battat)</p>		<p>Great for grasp, manipulation, shape recognition, use of power/force and cause and effect learning. The noise and vibration of the toy makes this very interactive for all types of children.</p> <p>https://www.cheapdisabilityaids.co.uk/shape-sorter-with-sound</p>
<p>Basic shape sorters with Key (Ambi toys: Lock a Block)</p>		<p>Lock a block shape sorter is a basic easy to use shape sorter. The three shaped blocks are smooth and 3D, meaning less manipulation is required. Therefore this is a perfect starter sorter before they advance to something like the battat or complex shape sorters. Key encourages pronation and supination movement.</p> <p>https://www.preciouslittleone.com/product-information/102/35522/galt-toys-lock-a-block</p>

<p>More complex shape sorters</p>		<p>More complex shape sorters encourage problem solving, more intricate shape recognition and more acute manipulation of each shape to get it to fit. Challenging initially but with good scaffolding support and guidance can really improve fine motor and cognitive ability.</p> <p>https://www.bigjigstoys.co.uk/first-rolling-shape-sorter</p>
<p>Toddler carts</p>		<p>Great toy for children who are also working on gross motor and walking. Cart can be used by both hands to push blocks and toys around the room, providing stability during mobility. Encourage child to fill up the cart with objects and heavy items, making it harder to push and increasing shoulder strength.</p> <p>https://www.argos.co.uk/product/8497220</p>
<p>Stacking cups and/or blocks</p>		<p>Encourages skills such as size recognition, understanding the basics of gravity, the ability to stack objects and co-ordination.</p> <p>https://www.theworks.co.uk/p/pre-school-toys/fisher-price-stacking-cups</p>
<p>Wooden coloured stacking pole</p>		<p>A good starting point for understanding stacking. The child must place the rings over the centre pole in size order. Also encourages shoulder strength, manipulation to align the hole of the ring with the pole and size organisation.</p> <p>https://www.woodentoyshop.co.uk/wooden-rainbow-stacker-toy.html?gclid=EAlaIQobChMIvNyeIY7R5wIvA7DtCh2BLQdcEAQYDSABEgJqnPD_BwE</p>

<p>Complex shape/peg boards</p>		<p>More advanced shape sorters such as these take fine motor skills one step further. Object recognition, manipulation, aligning shapes, using appropriate force is all challenged using these toys. A child must ideally be able to use a 3D shape sorter like the ones above before being challenged with these.</p> <p>https://www.bigjigs-toys.co.uk/first-four-shape-sorter</p>
<p>Safari Zig-Zag board</p>		<p>Can help build on grasp, shoulder stability and strength, co-ordination and problem solving. Brings in both hands together and one hand must hold/stabilise the toy whilst the other hand moves the pegs.</p> <p>https://www.argos.co.uk/product/8627241</p>
<p>Doodle Boards</p>		<p>First step to encouraging pen grasp and pen control without risk of drawing on other objects or walls.</p> <p>https://www.smythstoys.com/uk/en-gb/toys/creativity-music-and-partyware/drawing-boards/super-colour-doodle-board/p/106629</p>