

Fine Motor Skills Development

Developing Motor Skills

(Source: <https://www.parents.com/toddlers-preschoolers/development/physical/child-developing-motor-skills/>)

Your child's mastery of fine-motor skills will allow him greater independence. Here are some of the skills your youngster will perfect in the preschool years.

Another area of development to encourage this year is fine motor skills—or use of the hands. Just as gross motor skills enable your child to perform important everyday tasks, such as getting out of bed and going downstairs for breakfast, fine motor abilities allow for increasing independence in smaller but equally significant matters: opening doors, zipping zippers, brushing teeth, washing hands, and so on.

When combined with increasing hand-eye coordination, fine motor skills also open new doors to exploration, learning, and creative expression. In fact, research shows that emphasis on purely intellectual activities—memorization of letters and numbers, for instance—is far less useful at this stage than pursuits that encourage fine motor abilities and hand-eye coordination. These skills—rather than counting or reciting the alphabet—lay the foundation for academic learning in later years. In order to learn to write or draw, for example, a child's hand must be strong and coordinated enough to hold a pencil steady for a long period of time; in order to participate in school sports, games, and projects, dexterity and coordination must be up to par.

Among the fine motor skills your child will perfect in the preschool years are the abilities to:

- paste things onto paper
- clap hands
- touch fingers
- button and unbutton
- work a zipper
- build a tower of 10 blocks
- complete puzzles with five or more pieces
- manipulate pencils and crayons well enough to color and draw
- copy a circle or cross onto a piece of paper
- cut out simple shapes with safety scissors

The best way for you to help promote these and other hand-related skills is to provide your child with a wide range of materials to manipulate as her

imagination dictates. Good choices include blocks (especially the interlocking types like magnetic blocks, Legos, bristle blocks, Tinker Toys, and construction straws), crayons, nontoxic and washable markers and paints, paste, glue, modeling clay, an easel, construction paper, safety scissors, a smock to guard against stained clothing, coloring books, and simple sewing cards. This is also a prime time for puzzles, sand and water toys, and musical instruments.

Encourage Fine Motor Skills

Teach the pincer grasp. To help your child learn to pick up small items like Cheerios using her thumb and forefinger, stuff an empty baby-wipe container with scarves, and then let her try to pull them out. You can also give her toys that have dials, switches, and knobs.

Embrace his filling and dumping obsession. Your toddler will likely load every toy possible into a plastic bin—only to spill it out and start over. While this activity may seem dull, it takes integrated muscle movements, concentration, and cognitive reasoning. Other ways to boost grip and finger strength: squeezing a wet sponge or looking for toys that are buried in sand.

Let the stacking begin! Your child needs hand and wrist stability to place blocks with control. Large wooden ones are easiest for toddlers to manipulate. Once she gets the hang of it, you can switch to smaller building materials—but hold off on interlocking bricks until she's at least 2.

Facilitate creativity. Most kids can make a mark with a crayon at around 15 months and scribble by age 2. Big crayons are best for little hands, but you can also give him large pieces of chalk and finger-paints to express himself.

Be patient with utensils. Have your child start using a fork and spoon at every meal. If she makes a mess or struggles, resist jumping in to help—let her try to figure it out on her own.

Build on basic skills. As your toddler's dexterity improves, encourage him to use both hands to do new tasks. Have him try threading big beads or rigatoni pasta with yarn. And play games like "The Itsy-Bitsy Spider" to teach him how to work his hands in tandem.

Encourage Your Child's Creativity

Once you've provided your child with the tools that inspire creativity, stand back and let him loose, even if things are likely to get rather messy. Preschoolers tend to focus more on process than on product. They throw themselves into exploring the properties and possibilities of materials like paint, mud, sand, water, and glue without worrying about the results. In fact, when your 3-year-old proudly displays

his latest masterpiece, you should try not to ask, "What is it?" That question may have never even occurred to him.

Instead, admire the work for what it is: "That's really wonderful! Tell me just how you did it." Then, encourage him to explain to you in his own words how he felt and what he was thinking about while he was making it.

The less control you try to impose over your child's creativity, the better. This advice especially holds true when it comes to the hand your child favors. One of the milestones of this age is becoming right-handed or left-handed. In fact, handedness is an important sign of increasing brain organization. By age 4, some 90 percent of children have become clearly right-handed, while the rest have become dedicated southpaws.

The main determinant of handedness is heredity, so it's best not to tamper with your child's genetic predisposition. Left-handers are no less socially acceptable than righties. And when pressure from parents or preschool teachers induces a child to switch, doing so usually takes a long-term toll in emotional upset and poor coordination.

So let your child lead the way. And don't be alarmed if her fine motor skills progress more slowly than her gross motor development. Fine motor skills develop more slowly because the kinds of delicate movements that enable children to manipulate objects (stacking and nesting blocks or putting together puzzle pieces, for example) can be learned only over time with a lot of practice. Unfortunately, while most 3-year-olds will run happily for hours on a playground, few really have the patience to sit and copy a drawing of a circle or a cross over and over. And keep in mind that the smaller muscles of the body (like those in the hands and fingers) tire out more easily than the larger muscles in the arms and legs, so endurance and strength must be built up gradually before your child's dexterity can improve.

There's one more reason why your child's fine motor skills progress more slowly: They are closely linked to cognitive development. In order to build a fort with blocks, for instance, a child must be able to think in a three-dimensional manner. Adding limbs, hair, or facial features to an incomplete picture of a person means that your child is capable of understanding that two-dimensional drawings can symbolize real people. Your child must mentally compare the picture with stored images of what people look like to figure out what's missing from the drawing, and he must be able to manipulate a pencil or crayon well enough to fill in the absent features.

The thought process involved in such acts is far more complicated than that for figuring out how to climb a ladder, chase a ball, or walk out a door. So it's important for you to be patient, encouraging, and supportive of your child's efforts. Whatever he masters today will stand him in good stead once he starts more formal learning in kindergarten and beyond.

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Fine Motor Skills

(Source: <https://childdevelopment.com.au/areas-of-concern/fine-motor-skills/fine-motor-skills/>)

What are fine motor skills?

Fine motor skills involve the use of the smaller muscles of the hands, such as when doing up buttons, opening lunch boxes or using pencils or scissors. Fine motor skill efficiency significantly influences the quality of the task outcome as well as the speed of task performance. Efficient fine motor skills require a number of independent skills to occur simultaneously to appropriately manipulate the object or perform the task.

Why are fine motor skills important?

Fine motor skills are essential for performing everyday skills like self-care tasks (e.g. clothing fastenings, opening lunch boxes, cleaning teeth, using cutlery) and academic skills (e.g. pencil skills of drawing, writing and coloring, as well as cutting and pasting). Without the ability to complete these everyday tasks, a child's self-esteem can suffer and their academic performance is compromised. They may also be unable to develop appropriate independence in life skills (such as getting dressed and feeding themselves).

What are the building blocks necessary to develop fine motor skills?

Bilateral Integration: Using two hands together with one hand leading (e.g. opening a jar lid with hand while the other hand helps to by stabilizing the jar).

Crossing Mid-line: The ability to cross the imaginary line running from a child's nose to pelvis that divides the body into left and right sides.

Hand and finger strength: An ability to exert force against resistance using the hands and fingers that allows the necessary muscle power for controlled movement.

Hand eye coordination: The ability to process information received from the eyes to control, guide and direct the hands in the performance of a task such as handwriting.

Hand Dominance: The consistent use of one (usually the same) hand for task performance which allows refined skills to develop.

Hand division: Using just the thumb, index and middle finger for manipulation, leaving the fourth and little finger tucked into the palm not participating but providing stability for the other 3 fingers.

Object Manipulation: The ability to skillfully manipulate tools (such as the ability to hold and move pencils and scissors with control) and the controlled use of everyday tools such as a toothbrush, hairbrush, and cutlery.

Body Awareness (Proprioception): Information that the brain receives from our muscles and joints to make us aware of our body position and body movement, so we can accurately control our movements.

How can I tell if my child has problems with fine motor skills?

If a child has difficulties with fine motor skills they might:

- Have an awkward or immature pencil grasp for their age.
- Have messy, slow or laborious drawing, coloring or writing skills.
- Fatigue quickly when typing or using a mouse on a computer.
- Have difficulty (or achieves a messy/choppy outcome) when using scissors.
- Have difficulty performing precise manipulation tasks (i.e. doing up buttons, threading, or tying shoelaces).
- Dislike precise hand and eye coordination tasks (e.g. construction).
- Have difficulty performing age appropriate self-care tasks independently.
- Have difficulty mastering new fine motor tasks.
- Tire easily when engaged in fine motor tasks.

What other problems can occur when a child has fine motor skill difficulties?

When a child has fine motor skill difficulties, they might also have difficulties with:

- Behavior: They may avoid or refuse to participate in fine motor tasks.
- Frustration with precise eye and hand coordination tasks.
- Avoidance of these tasks: Preferring to get others to perform fine motor tasks for them under their direction, rather than actually doing themselves (e.g. “Daddy, draw me a house”, or “build me a rocket”, with refusal to do it themselves).
- Showing academic ability: Being verbally very skilled but having difficulty showing this on paper (i.e. writing, drawing or coloring).
- Self-esteem: when they compare their own skills to those of their same aged peers.
- Academic performance: The ease with which a student is able to complete academic tasks.
- Computer skills: The ability to competently use a computer for the purpose of academic tasks.

What can be done to improve fine motor skills?

- Hand dominance: Determine which is the dominant hand and reinforce its more frequent use in precision task performance.
- Bilateral Integration: Practice using both hands to perform tasks, not just one (e.g. use the ‘doing hand’ to place the block and the ‘helping’ hand to hold the block construction steady).
- Finger Isolation: Practice tasks that use just one or two fingers – not all the fingers at once (e.g. ‘poking’ games).
- Hand and Finger Strength: Enhance finger strength by using pegs and/or clips in play.
- Experience: Encourage enjoyment in activity participation instead of focusing on a ‘successful’ outcome (e.g. rewarding pencil to paper attempts, not whether the drawing actually looks like a car or a house).

What activities can help improve fine motor skills?

- Threading and lacing: with a variety of sized laces and beads.
- Tongs or teabag squeezers: to pick up objects (e.g. put marbles down a marble maze).
- Manipulation games: such as ‘Pick up Sticks’ and ‘Connect 4’.
- Play-doh: Using the fingers, not the hands as whole; working with the Play-doh up in the air, not flat on the table.
- Construction: that requires pushing and pulling with fingers (e.g. ‘Mobilo’, ‘K’nex’ or ‘Lego’).

- Storing construction materials in jars with screw lids that need to be opened and closed as the materials are needed and when packed away.
- Craft: Make things using old boxes, egg cartons, wool, paper and sticky or masking tape.

Why should I seek therapy if I notice difficulties with fine motor skills in my child?

Therapeutic intervention for a child with fine motor skills difficulties is important to:

- Improve their ability in, and persistence with, fine motor tasks that are required for academic, play and life skills.
- Increase school readiness and academic performance of: coloring, drawing, writing, cutting and pasting skills.
- Help my child develop age appropriate mastery of self-care tasks, such as doing up buttons and zips, opening lunch boxes, tying shoe laces.
- Avoid my child becoming disengaged in an academic environment due to difficulties completing fine motor activities (e.g. writing, cutting, drawing).
- Avoid frustrations experienced by parents, teachers and children when the child is struggling to remain engaged in academic activities.
- Help maintain and develop a positive sense of well-being that is related to school confidence as well as fine motor play skills with peers.
- Ensure that my child doesn't fall behind their peers in development of handwriting as this is a common reason for academic under-performance.

If left untreated what can difficulties with fine motor skills lead to?

When a child has difficulties with fine motor skills, they might also have difficulties with:

- Meeting academic criteria due to poor handwriting skills and/or rapid physical fatigue.
- Mastering letter formation, which slows writing and reinforces dislike of the task.
- Excessive pressure and anxiety in a school-aged child due to difficulties 'keeping up' in class.
- Completing exams due to difficulty answering all written questions within the allocated time.
- Poor self-esteem when the child compares their abilities with their peers.
- Developing efficient typing skills.

- Manipulating items for construction (puzzles, Lego).
- Completing self-care tasks (e.g. doing up shoelaces, buttons, zips, using cutlery).