# ACTIVITiES <br> FOR THE DEVELOPMENT OF FINE MOTOR SKILLS IN CHILDREN <br> By: Loubaina Buxamusa M.Ed. OTR/L Occupational Therapist 

Fine motor skills refer to the ability to use the small muscles of the hand, with adequate strength, dexterity and coordination, to grasp and manipulate objects of different sizes, weights and shapes. These skills are important for a child's success with school-based activities, such as writing and manipulating classroom materials. They are also an integral part of everyday functional tasks such as dressing, using utensils and tools, playing musical instruments and games.
I recommend at least 15 to 30 fun minutes of fine motor activities daily to improve hand skill development in children ages 2 to 6 years.

PALMAR ARCHES

provide the hand with mobility and form a support surface for the fingers to move with isolated control. Palmar arches allow for the cupping action of the hand to hold objects such as a pencil, or do manipulative activities like string beads and build with blocks. Toys that involve squeezing, pinching, putting small objects together and pulling them apart, are all examples of activities that will strengthen the palmar arches. Playdoh and silly putty can be used in many ways to develop hand arches.

Molding and rolling playdoh into balls using the palms of both the hands.
Rolling into pea sized balls using only the finger tips.
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Using pegs or toothpicks to make designs in a flattened piece of playdoh.
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Picking out small objects embedded in the playdoh, such as beans, macaroni etc.
Tearing newspaper into strips and then crumpling them into balls. Use to stuff scarecrow or other art creation.


Shaking dice by cupping the hands together.


Using eye droppers to "pick up" colored water for color mixing or to make artistic designs on paper.

## WRIST STABILITY The ability to stabilize the wrist while using the

 fingers, develops progressively from about 8 months of age into the early school years. The wrist joint should be slightly extended (bent back) for the fingers to be able to move with precision, strength and control. A flexed (bent down) wrist posture should be discouraged during fine motor activities, especially during writing/drawing. The child should place his/her wrist firmly on the writing surface and not hold it up off the table.Vertical or near vertical work surfaces, above eye level, should be used for the preschooler and kindergartner as much as possible to facilitate wrist extension. This can be achieved by book holders on a table, table top easels, regular floor easels, chalkboards, magnetic white-boards on the refrigerator, or taping large paper to a wall for drawing and coloring activities.

Position fine motor activities like peg boards, Lite Brite, ink stamping, geo-boards on a floor easel or on a tabletop easel. Etch-a-Sketch and Magna Doodle should be turned upside down so the knobs are on the top.

Donkey Kicks: Have the child place his hands on a mat directly below his shoulders with fingers pointing straight ahead. Start with both feet to one side and "kick" up and over to the opposite side. His body weight should be on his open palms and on his tip toes, and ankles should be touching at all times.


Wheelbarrow Walking: The child walks on his hands, with adult supporting the ankles.

Animal walks: Practice different walks such as a bear walk, a crab walk, etc, so that a large part of the child's body weight is on his hands as he moves.

Chair push-ups: While seated on a chair, have the child place his hands by his side on the chair and push down on his hands so as to lift himself slightly of the chair.

Row, row, row your boat: Have child seated on floor, facing you. Push against his hands and he pushes against yours. Keep hands firm, wrists extended so that neither player is knocked over.

## SKILLED SIDE OF THE HAND

The thumb, index and middle fingers work together for activities that require precision and are referred to as the "skilled side of the hand". The power side of the hand (i.e. ring and little finger) flexes to provide stability for the arches to control the "skilled" fingers. The thumb web space should be circular when performing skilled activities. Using a pencil with a tripod grasp and cutting with scissors are examples of precision activities that require efficient use of the "skilled side of the hand". The manipulative activities listed below will strengthen the muscles of the "skilled side of the hand".
Once the child has developed a clear separation of the skilled side of the hand, he/she can hold a pencil or other writing tool more efficiently without getting tired or pressing too hard or too light on the paper.


Using a plant sprayer to spray plants or a food coloring solution onto snow. "Monster melt"......draw monster pictures with a marker and then spray them with water.

Using tweezers to pick up Cheerios, small marshmallows etc. for counting games.

Opening clothespins to hang up clothes or pictures on a line.

Small child-sized paper punches which punch out different shapes.

Small screwdrivers and other hand tools.
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Lacing activities with Cheerios, Fruit Loops, small pieces of plastic straw, macaroni.

Small stem tops to spin.
Turn over cards, coins, or buttons without bringing them to the edge of the table.
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A manual eggbeater is a great tool for developing the 'skilled' finger control.

Using eye-droppers, mix food coloring and water to make pictures.

Inserting feathers into small holes in paper or into playdoh.
Playing games with the 'puppet fingers' i.e. the thumb, index and middle fingers.
Use small pieces of chalk and small, fat crayons or markers to write/draw.

## INTRINSIC HAND MUSCLE DEVELOPMENT



When the ulnar (little finger) side of the hand is stabilized on the table, the muscles that are intrinsic to the hand itself control the fingers to make fine movements as in writing or threading a needle. These activities require the tips of the thumb, index finger, and middle finger to be touching while they move with small excursions.

Wrap a rubber band around the fingers and spread them apart and together against the resistance.


Cats cradle

Raise and wiggle the thumb and each finger in turn (Where is "Thumbkin" song)


Hide pennies or small objects in palm. Move to fingertips without dropping them or using the other hand to help. Now move them back into the palm.

Pick up small objects, one at a time, and curl them into the palm. When the hand is full, drop the objects, one at a time, into a narrow jar.

Unwrapping tight candy wrappers, cereal boxes, milk cartons
Dealing and sorting playing cards
Bicycle horn
Clothespins of different resistance
Pulling out objects buried in silly putty
Play tug-of-war with coffee stirrers or shoe lace.
Rotate a small container (or a liquid laundry detergent cap) with the hand supinated, using fingertips only. Adding water to the container will make this activity more challenging.


Writing in flattened putty or wet sand holding a small piece of chalk or other writing implement.

## BILATERAL HAND SKILLS

The ability to go across the body's midline with the arms while reaching for objects, is an important precursor to developing hand dominance and smooth bilateral skills. Activities involving use of both hands in midline, as well as activities involving the symmetrical use (e.g. clapping hands) and the asymmetrical use (e.g climbing a ladder) of both hands are beneficial for the development of hand skills and hand dominance.

Ripping paper to make a collage or paper mache
Cut a slit halfway across a tennis ball. Draw a face on it so the slit becomes a mouth. Squeeze open the "mouth" with one hand, while feeding small objects into it with the other hand.

Catch bubbles by trying to trap them between both hands


Lacing cards, bead/pasta stringing
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Drawing on a vertical surface using both hands. e.g. drawing a heart or a Christmas tree

Hitting at balloon with both hands on a baseball bat, to keep the balloon afloat
Using a rolling pin to flatten playdoh
Simon Says, an imitation of postures game. Have child imitate postures involving midline crossing with arms and legs.

Drawing a large $X$ on a paper taped to the wall, using each hand in turn.
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Place objects to the far side of the child's midline and encourage reaching for them with the opposite hand so as to cross the body midline.

Cutting curves, squiggly lines, and other complex figures
Stencils. The non-dominant hand should hold the stencil down firmly while the dominant hand traces.

## SCISSOR SKILLS


should be taught around 4 years of age since the hands are developmentally ready to grasp them correctly. When scissors fit the child's hand well, cutting will exercise the very same muscles that are needed to manipulate a pencil in a mature tripod grasp. The correct scissor grasp is with the thumb and middle fingers in the holes, the index finger on the outside to stabilize, and the ring and little fingers curled into the palm. The thumb of the hand holding the scissors should be on the top and the scissors should be pointing straight and away from the child. The nondominant hand, which holds the paper, should also have the thumb on the top of the paper.
Be sure to use child-sized scissors so that the loops and the length of the blades are not too big for the child's fingers.


Cutting playdoh, silly putty, or other resistive materials such as playing cards, plastic straws, old credit cards


Making confetti by cutting strips of paper
Cutting a fringe on the edge of construction paper
Once grasp and making single snips is mastered, cut through broader strips of construction or card stock paper


Gradually introduce cutting on straight lines of increasing length, making sure that the non-dominant hand moves along the paper as the line gets longer


Once straight line cutting has been mastered introduce curves, eventually increasing the length of the curve to a complete circle.


Cutting angles, zigzag lines and along multiple curves is usually introduced in kindergarten.

