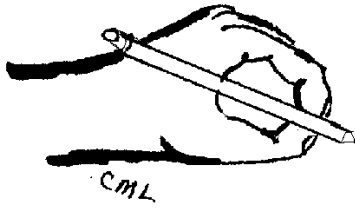


# Developing an Efficient Grasp

by Carrie Lippincott, OTR/L



*Tripod Grasp*

The following activities involve the use of delicate muscles in the hand. Children often need help to learn how to properly use his or her hand muscles. So these activities require close monitoring, at least at first, to ensure that the proper muscles are being used. This is done by teaching your child how to position his or her fingers and thumb as the activities are done.

In general, to help develop your child's pencil grasp, give him or her activities that involve using a pinching motion (touching the pad of the thumb to the pad of the index finger). Therapists call this a pincer grasp. I teach this to the children by telling them to make an "O" with their thumb and index (and middle) finger(s). This flexes all the joints. The challenge is to maintain the "O" without it collapsing (joints going into extension). I prompt children by saying something like, "Can you fix your O?" Using the hand in this manner will help the child to develop the muscles to hold a pencil with a tripod grasp (tips of the thumb, index fingers are on the pencil shaft) or quadruped grasp (tips of the thumb, index, and middle fingers are on the pencil shaft).

Also teach your child to tuck the ring and little fingers into the palm when doing manipulatives. You can have your child first make a fist and then get the thumb and index fingers out to make the "O". The ring and little fingers are always to stay tucked into the palm. If this is a problem, give him or her a small piece of crumpled Kleenex, small pom pom, or a quarter to hold under his or her ring and little fingers as a reminder. Have the child pick out which item feels the most comfortable. The ring and little fingers should never be used on a pencil or crayon. Please contact an Occupational Therapist if you are having a hard time getting this hand position with your child.

A child may also automatically switch to doing the items pinching the thumb pad to the side of the index finger (like a key is held). If your son or daughter is still unable to do it properly, the activity may require too much strength for these muscles. Simply switch to something easier until greater hand strength is developed. Try using larger diameter crayons and larger objects at first, while the hand is weak, and focusing more on the hand strengthening activities.

For all activities, be sure the child maintains an "O" shape with the thumb/index fingers. OTs call this keeping an open webpace.

1. Have child do art projects using **short (1/2" - 1") pieces of chalk, sidewalk chalk, crayon or pastels.** A large diameter is also easier to handle for weaker hands. There are only two ways to hold small pieces like this. The first and preferred way is pinched between the pads of the thumb and index fingers. If your child has a weak hand he or she will hold it in a key grip. This is how you hold a key in opening a lock, with the thumb pinching the pieces to the side of the index finger. Please focus on strengthening activities and ask the Occupational Therapist for additional help.
2. **"Finger Tug of War"** Use a popsicle stick or small piece of rubber tubing. Have your son or daughter make an "O" with his or her thumb and index fingers, making sure all the joints are nice and round or flexed. Then both of you pinch either end of the tube or stick, being sure to keep the "O" shape, and pull. Don't let the "O" collapse or you lose! Don't let your child switch to a key grip, pinching the item to the side of the index finger like a key is held. This is a stronger grip so it is a natural reaction, but it's not strengthening the muscles used in hand writing.
3. **"Hand Races"** Using silverware or pencils (or whatever!) line items up and gather them into one hand as fast as you can. Race against the clock, your previous "record", or a friend. Also try this with smaller items such as buttons, toothpicks, or pennies.

Then, keeping pennies or paper clips in your hand, try to place them one at a time into a slotted container such as a cut-out yogurt container or piggy bank. Also, try the reverse -- how many pennies

or paper clips can the child pick up one at a time and hold in his or her hand before one drops? This is one of the more difficult suggestions for hand skills.

4. Children enjoy putting **pennies** in and out of slots cut into foam pieces (like a ring display). The slots are easier to see if you mark them with a marker.
5. Use a **clothespin** to do finger "push-ups". Use the pads of the thumb and index finger to open a clothespin and count the repetitions. As in the previous item, encourage your child to keep all the finger joints rounded or flexed. (It may help to tell your child to touch his or her fingernail to the clothespin. This helps to keep all the joints flexed). Challenge your child to do one more each time. (This can be tiring so you will not want to do it for long periods. Some pins are easier than others. Plastic and small wooden ones tend to be easier.) Also try pinning them to the side of a container. You can write letters on the side of the clothespins and use them to make words.

There are also variations of games to do with clothespins: Use clothespins to pick up small pieces of crumbled paper. Try passing the paper to each other and then dropping in a bucket. Then after doing this activity have child do some type of fun visual motor activity (mazes, dot to dots, tracing) practicing this finger position on his or her pencil.

6. Use **squeeze bulbs** (baby nasal aspirators or turkey basters) to blow cork or ping pong balls back and forth. Squirting water is also a fun way to move the ball or cork.
7. **Push pins** into foam with a paper design over the top. Mouse pads also work to poke into with pushpins.
8. **Play with clay**, using thumb and index fingers to pinch pieces of clay off. Make dragons and pinch marks on top of the dragon. Play with pushing pegs or marbles into the clay using the thumb and index fingers. Give your child some gentle resistance as he or she takes the peg or penny from you. Be sure that your child is able to maintain his or her thumb and index finger in flexion or maintain the "O" shape.
9. Try **stringing beads** together.
10. **Lacing sewing cards**. (One hand holds the thread or needle pinched between the thumb and index fingers). Children can also easily sew burlap or make a design in plastic canvas.
11. Playing games on **pegboards**. Score Four is a game of putting beads on pegs to get four in a row. The travel version of Connect Four is also a nice fine motor game of dropping disks in a grid.
12. **Collages**. Tear pieces of construction paper into small pieces and paste the different colors of paper on an uncolored picture. Or make your own design. For example, get a piece of heavy paper for pasting the project to. Cut some rectangles of brown paper 2 x 6 inches. Use them as tree trunks. Have your child tear green construction paper up for leaves and paste it all together.
13. Try having your child make a **small mosaic picture** by gluing colored rice to a picture traced on a small board. Rice can easily be colored by shaking it in a plastic bag with food coloring.
14. Do watercolor pictures with the **small paints sets** and brushes found in the birthday favors section at stores. To make the brush easier to hold, wrap the brush with masking tape and push it into a pen cap with the stem broken off.
15. Moving objects with a large pair of **tweezers** (such as plastic medical supply, tweezers from Bed Bugs, a strawberry huller or small tongs) is a great hand strengthening activity for the hand. Initially a child may hold the tweezers with all four fingers on them. That's okay at first, as your child is learning to manipulate the tweezers. When this is achieved, transition your child to doing the tweezers with the thumb-index-middle fingers or thumb-index fingers only. Teach your son or daughter to tuck the ring and little fingers in.