



# ***A PARENT'S GUIDE TO PENCIL GRASP***

***A common concern among parents exists regarding pencil grasp. Many times, parents wonder if their child is holding the pencil correctly, and how to help them when pencil grasp is a real struggle. Other parents wonder where to start in working on fine motor skills kids need. One thing is for certain; There are specific things parents to do to facilitate more effective fine motor development and a more functional pencil grasp***

No matter the age, parents have questions on pencil grasp. "Should my preschooler hold their crayons with their whole hand?" or "My 7 year old has a strange pencil grasp. Should I be concerned?" are just two common questions occupational therapists address quite often. In this packet, answers to these questions and others will be addressed. Use this resource as a guide to address frequently asked questions about pencil grasp, understand normal progression of grasp,

and know when intervention is necessary.

Handwriting is a complex skill that involves many facets of fine motor skills, the use of the eyes, and cognitive abilities. Pencil grasp is just one facet of handwriting, but it's one that is very visible during the writing process. Many times, an obvious awkward grasp can be deemed the cause of messy handwriting. However, when it comes to pencil grasp, there is more than meets the eye. A child's ability to efficiently use a pencil while writing letters and words is a skill that depends on development, fine motor skills, and other areas.

# PENCIL GRASP

## What you need to know

**Questions about a child's pencil grasp** are very common. Parents wonder if the grasp their child is using is normal for their age. You might wonder how to help your child form a better grasp so that handwriting isn't so frustrating or difficult for your little one. These concerns are very normal! Before getting into specifics, let's talk about normal progression of pencil grasp.

### Primitive Pencil Grasps

A primitive grasp is the term used to describe grasp development that occurs from the time a baby begins reaching for and grasping toys. When a baby starts this skill, they grasp objects with their whole hand. You will see all of the fingers and thumb wrapped around toys or rattles. When a child uses a primitive grasp to hold a crayon or marker, you will notice their whole arm being used to make the marks. The fingers are not being used on their own to move the writing utensil. Some primitive pencil grasps include the ones listed here:

#### **Whole Hand Grasp/Palmer Supinate Grasp-**

(Typically seen between 12 months-1.5 years)  
From around 7 months of age, babies begin to pick up small items like cereal pieces with their finger tip and thumb. This is called a pincer grasp. As they develop stronger hands and visual skills, babies are able to use their whole hand to grasp items like blocks, rattle toys, etc. This progresses from the pincer grasp into using the thumb and all four fingers wrapped around an object. Why am I telling you this? Because that whole hand grasp is a beginning grasp used to hold a crayon. You might see a child who holds the crayon with their whole hand, with the writing end of the crayon sticking out near their pinky side of the hand.

It looks like they are holding a paint stirrer or potato masher. This is important to understand because this positioning uses the whole arm to move the writing utensil. Think about mashing potatoes with a masher. You need a lot of strength to smash potatoes! Kids at this stage don't yet have the fine motor skills to move the crayon, so they use what they've got: whole arm strength! Important to note about the primitive stage: These grasps are a necessary part of development. If a child skips any one grasp, it's not a big deal, however if you see a young child using these grasps, know that it's totally normal and expected. Another important piece of information occupational therapists wish parents knew is the importance of crawling. When babies skip crawling or don't get enough floor time, they miss out on essential core muscle and shoulder development that plays an important part in fine motor skills.

#### **Digital Pronate Grasp/ Pronated Wrist Grasp-**

(2-3 years) The next phase of grasp development seems to shift the crayon in the hand so the tip of the crayon (or the drawing end) is held on the thumb side of the hand. The child is still using their whole hand to move the crayon and make marks, so you will see the wrist bent forward. You may see them tuck their pinky and ring finger into the palm of their hand as they use the thumb, pointer finger, and middle fingers to hold the crayon or marker. There are variations of this grasp where the child may hold the crayon with just the pointer finger and thumb or they may not have a bent wrist. In most cases, the crayon or marker is tucked inside the palm of the hand. In other words, the "eraser end" of the writing utensil doesn't make its way through the thumb web space. Sometimes, this grasp is considered a transitional grasp, but if whole arm motions are present, it is considered a primitive grasp pattern.

## Pencil Grasp Development, cont.

### Transitional Pencil Grasps

The transitional stage is a developmental step following primitive grasp patterns. The child moves away from using their whole arm to move the crayon and begins to use their forearm and wrist to move the crayon or marker. These grasp patterns may include: cross-thumb, four-fingered, and static tripod grasps. Despite the various grasps, all include a consistent theme; Movement of the pencil occurs more distally with wrist movements (compared to using the whole arm), but not distal finger movements. Some transitional pencil grasps include the ones listed below. NOTE: The child may use several of these grasps, but this is not a progressive list, meaning they do not progress through these grasp patterns. The grasps listed below are types of grasps you may see during the transitional stage.

**Four Fingered Grasp-** (3.5-4 years)- With this grasp, children hold the crayon between their thumb, and tips of the pointer finger, middle finger, and ring finger. The crayon is moved by the forearm and not the fingers.

**Static Tripod Grasp-** (3.5-4 years)- In this grasp, the child holds the writing utensil with the thumb, pointer finger, and rests the utensil on the last joint of the middle finger. The ring finger and pinky fingers are tucked into the palm of the hand. The crayon or pencil moves by the work of the wrist or forearm and the fingers don't move other than to hold the utensil.

**Other grasp patterns-** There can be many variations of grasp patterns that occur in the transitional stage, marked by the use of the wrist or forearm to move the pencil. Therapists will often times describe positioning in their assessment or screening to identify positioning.

### Mature Pencil Grasps

In the typically developing child, progression from a transitional stage to the mature stage occurs when children begin to use their fingers and hand to move the writing utensil. This usually occurs between 4-6 or even 7 years. The range for this stage is bigger than commonly thought and varies depending on the child. A child who progresses to a mature grasp pattern requires stability of the shoulder and upper body to stay in a supportive and stable posture. Weakness in the upper body or arm can be seen when the child fluctuates between using the fingers and forearm or shoulder to move the writing utensil. Some descriptions of mature grasp patterns include (but are not limited to):

**Dynamic Tripod Grasp-** (4-6/7 years) This grasp is seen when the thumb and pointer finger hold the pencil as it rests on the last joint of the middle finger. Pencil movements occur via manipulation of the fingers and hand. Note that a true dynamic tripod grasp may not be established up until around 14 years of age.

**Lateral Tripod Grasp-** This grasp occurs with the thumb pressed in against the pencil (or adducted) to hold the pencil against the side of the pointer finger. The tip of the thumb may bend over (or flex) over the pencil in a "wrapped" position. This grasp is sometimes called a **thumb wrap grasp** because the thumb is not involved with the distal movement of the pencil. Distal mobility occurs, but it is the index and middle fingers manipulating the pencil.

**Dynamic Quadrupod Grasp-** This grasp is similar to the dynamic tripod grasp, but opposition includes the thumb, pointer finger, middle finger on the pencil shaft.

**Lateral Quadrupod Grasp-** This grasp is similar to the lateral tripod grasp, with its thumb wrapped positioning of the thumb, but uses the pointer, middle, and ring fingers are on the pencil shaft and manipulate the pencil

# Pencil Grasp: Get to the Point

## Main Things You Need to Know About Pencil Grasp

If your eyes glaze over when it comes to pencil grasp, how your child is holding a pencil, and how to help them, don't worry! Here are the main points you need to know about pencil grasp development:

### Pencil grasp is not a clear-cut pattern!

In typically developing kids, children progress from using their whole arm to move a crayon, to using their forearm and wrist, to using their fingertips. That progression indicates upper bodies that support the arm, strong arms to stabilize posture, and refined fine motor skills.

### Functional writing is most important.

This is the biggest take-away that therapists want parents to know: A functional pencil grasp might not look like the traditional tripod grasp. Kids can hold their pencil with a thumb-wrap, cross-over, modified tripod, quadrupod grasp, or any of the many other variations...and STILL write in a way that is legible and efficient.

Research tells us that pencil grasps do not impact skills like letter formation or legibility. In the child using a mature pencil grasp (the fingers and hands do the work to move the pencil), variations of pencil grasp do not impact writing speed. When speed is an issue, there is probably something else going on such as the child is using a transitional grasp pattern, sensory issues like heavy writing pressure are present, or motor planning issues like letter formation are occurring.

### Kids need play!

Sometimes the connection between crawling, fine motor exposure, and play isn't apparent when it comes to pencil grasp. Children need fine motor play to develop hand strength for precision and using those fingers.

### Children do not need a perfect grasp as soon as they pick up a pencil.

So often, kids are rushed to hold a pencil perfectly. This assumption happens in classrooms everyday. Children start to learn to write letters sometimes before they are developmentally able to manipulate a pencil with precision, and it's OK to see a pencil grasp that isn't perfect in preschool, kindergarten, or even the early grades. Keep offering fine motor experiences, play, and activities!



# PENCIL GRASP

## Activities to Boost Skills

Use these activities and play ideas to develop the fine motor skills kids need to hold and move a pencil with greater precision.

- Build with LEGO blocks
- Use various twist off jars and containers to open/close jars
- Push coins into a penny bank one at a time
- Play with games like Connect 4, Battleship, Hungry Hungry Hippos, Operation, and Lite Bright
- Use spray bottles to squirt at targets such as chalk letters on a driveway or sidewalk
- Tape paper to a wall and use cookie cutters to trace shapes
- Crab walking and other animal walks
- Yoga
- Play with sticker books
- Make homemade play dough
- Use tweezers to pick up and sort small objects
- Use dry pasta to create art projects
- Press toothpicks into play dough
- Punch holes in paper using a hole puncher
- Play with wind-up toys. Have a race with the toys!
- Tear paper into small pieces
- Make paper mache projects
- Crumble small squares of tissue paper using the fingertips
- Pinch clothes pins onto the edge of cardboard or baskets
- Use pipe cleaners to thread beads to make bracelets or necklaces
- Press beads into play dough...then find them!
- Play games with cards such as UNO or Go Fish
- Make finger print art using just the pointer finger
- Fill a balloon with flour or rice and use it to squeeze
- Play with finger puppets
- Use small pop beads to create jewelry
- Make paperclip chains
- Use real locks and keys
- Use an eye dropper to drip vinegar into baking soda
- Play finger games like Where is Thumbkin, and Itsy Bitsy Spider
- Press thumbtacks into a bulletin board
- Thread beads onto craft feathers
- Lacing cards
- Play on the monkey bars
- Climb up the slide (when safe!)
- Wall push-ups
- Use a rolling pin to roll dough or play dough
- Use child-friendly knives to cut fruit like bananas or slices of melon
- Use marshmallows and toothpicks or barbeque skewers to build
- Play in shaving cream
- Use small stamps to make a DIY coloring page. Color in the small spaces with colored pencils
- Draw cotton balls or mini-erasers into a clean, dry plastic water bottle
- Throw and catch a ball
- Climb trees