



Learning to Grow

MAKING A DIFFERENCE TOGETHER

The Building Blocks of Fine Motor Skills

Fine motor skills are used in many activities of daily living such as eating, dressing and playing. This involves the coordination of small muscle movements of the hands and fingers.

Before fine motor skills develop, children need strong torso neck and shoulder muscles. They need good proximal (trunk) stability for distal (arm & hand) mobility. In other words, if a child cannot maintain an upright standing or sitting position, she will struggle with using her hands (e.g., standing at an easel while painting). Control of arm and hand movements develop from the shoulders out to the fingers, and from large, inaccurate movements to small, precise movements.

The development of fine motor skills is like building a house with blocks. The first level, or foundation consists of the following building blocks:

- ♥ **Stability** – holding parts of the body steady as a base for movement to occur; it is the combination of strength and balance
- ♥ **Sensation** – responding to the sensation from the hands and changing body positions; it is knowing where your fingers, hands and arms are, and how they are moving
- ♥ **Bilateral coordination** – using both hands or sides of the body together in an activity; it leads to the development of a dominant hand (becoming right or left-handed)

The next level supports the roof: these are self-care, play/leisure and school readiness activities, and consists of the following building blocks:

- ♥ **Dexterity** – making skillful, precise and efficient hand movements



- ♥ **Visual-motor** – using vision to guide hand movements; it's the coordination of the finger and hand with eye movement and focus

In this newsletter, we will discuss the building blocks of fine motor skills as well as share activities that support the fine motor development of infants, toddlers and preschoolers.

This newsletter includes:

- ♥ **Age-specific information and suggestions** about activities to do with your infant, toddler, or preschooler,
- ♥ **Featured activities** for each age group,
- ♥ **How This Helps:** a summary of your child's development by doing these activities together,
- ♥ **Resources:** for more information, and
- ♥ **Suggested Books:** a list of books to read with your child.

Infants

Infants are developing control of their body. They are learning to visually focus, look at things and track objects with their eyes while holding their head steady in midline (midline is the imaginary line in the middle of a person's body that divides left side from right side). They are becoming aware of their hands as they actively move both arms and bring their hands to their mouth. They use both their mouth and hands to explore objects.

Here are some activities that focus on the building blocks of **stability** and **sensation**:

- ♥ **Play on the floor together.** Floor time play is the perfect time to help your baby develop her head, trunk and shoulder stability. While lying on her back with her head in midline, encourage your baby to follow you with only her eyes as you talk to her while slowly moving. While your baby is on her tummy, place a baby safe mirror or bright toy directly in front of her to entice her to lift her head and trunk up. Use different textured mats or blankets on the floor to provide additional sensory experiences.
- ♥ **Play in supported sitting.** This provides an



opportunity for her to practice holding her trunk steady while using her arms. While sitting on the floor with your baby between your legs or on your lap, support her trunk as needed. Let her explore a plastic tub or bowl filled with a variety of textured objects and/or material, such as a furry stuff animal, a bumpy ball, etc.

- ♥ **Play at bath time.** Taking a bath can expose your baby to new sensory experiences that help develop her sensory perception in her arms and hands. She is learning to feel the different temperatures of the water, textures of the bath toys, sponges or towels, and the sensation of the soap or lotion that you use.

Activity for Infants: *Rock and Roll Rattle*

What You Need:

- An empty cylindrical container (e.g., oatmeal or salt container)
- Bells, buttons, pennies, or other items to be used as noisemakers
- Strong tape (e.g., strapping or duct tape)

What to Do:

1. Place noise makers in cylindrical container.
2. Securely tape shut the opening.
3. Find an open space where you and your child can move around freely.
4. Place your baby on her tummy to encourage her to hold her head up.
5. Place the rattle where she can see it and must reach or move in order to touch it.
6. Roll the rattle to make sounds; then help your baby shake/move the rattle.
7. Encourage your baby to reach for the rattle and rock it back and forth.

Safety alert: Do not let your baby play with a small object or put it in her mouth. Items that are small enough to fit through a toilet paper tube can cause choking if swallowed.

(See page 5 for information on how doing these kinds of activities with your child helps her development and school readiness.)



Toddlers

Toddlers are active explorers of their environment and objects. They freely use either hand to grasp, manipulate and explore objects. They are getting stronger and developing their balance which allows them to play in different positions. They use a directed or precision release to place objects into or on top of something. They are learning to isolate their finger movements for pointing, poking and picking up small objects.

Here are some activities that focus on the building blocks of **stability** and **bilateral coordination**:

- ♥ **Play in sitting and standing positions.** This develops your toddler's trunk strength and stability while using her arms and hands. Sit on the floor facing your toddler and push a large ball or toy with wheels back and forth to each other. Tape a large piece of paper to a wall at your toddler's shoulder height while standing and provide her with washable markers for drawing. Use a plastic jar or cup to hold the markers to give your toddler practice with her precision release.
- ♥ **Provide scooping, pouring and mixing activities.** This provides opportunity for your toddler to use one hand to hold while the other



hand manipulates. Cooking together with your toddler provides opportunity for her to use one hand for scooping, pouring or stirring while her other hand holds the bowl steady. (Try the Kid's in the Kitchen recipe.)

- ♥ **Create opportunities for picking up, carrying and placing items at different heights.** This helps to develop your toddler's body and shoulder stability while using both hands. Having your toddler help you clean up and put away her toys provides a great opportunity for her to practice picking up, carrying and placing items back onto a shelf or table.

Activity for Toddlers: *Crumpled Paper Ball Play*

What You Need:

- Recycled paper (e.g., paper bags, magazines)
- Empty boxes (e.g., shoe boxes) or baskets

What to Do:

1. Prepare paper for your toddler to tear (e.g., open up paper bags or tear pages out of the magazine).
2. Show your toddler how to hold the paper with one hand while using her other hand to tear the paper into strips and pieces.
3. Have your toddler pick up a handful of paper pieces and then crumple them together using both hands to form a ball; make enough balls (sizes may vary) to fill one of the boxes or baskets.
4. Place empty boxes or baskets at different levels and locations for your toddler to fill, dump, refill with her crumpled paper balls. Can she toss a ball into the box or basket? Have fun playing ball!

(See page 5 for information on how doing these kinds of activities with your child helps her development and school readiness.)



Preschoolers

Preschoolers use their expanded physical strength and control to engage in more complex activities of daily living. They are able to use their finger and wrist movements to manipulate objects as well as move objects around in their hand without letting any go. Their expanding fine motor skills support their developing literacy and self-help abilities. Preschoolers enjoy experimenting and using different art materials to write, draw and create.

Here are some activities that focus on the building block of **dexterity** and **visual-motor**:

- ♥ **Provide a variety of materials to build and create with.** Interlocking blocks, play dough, and loose parts (e.g., pipe cleaners, beads, spools, etc.) encourage the use of in-hand manipulation of objects as your preschooler problem-solves how to assemble and make things with them. For example, provide your preschooler with straws cut into 3-inch pieces and play dough to create a sculpture.
- ♥ **Place desired play materials in different containers with lids and bags with fasteners.** This will provide your preschooler with the opportunity to practice opening/closing lids,



zippers, and jars when playing. For example, keep favorite toys in a pouch with a large zipper.

- ♥ **Model writing letters and drawing simple shapes (e.g., cross, diagonal lines, square).** Seeing you write and draw is very motivating for your preschooler to do the same. Encourage her to trace the letters of her name or simple shapes using pencils and crayons. This helps her with using her thumb and fingers to grasp and manipulate a writing or drawing implement as well as discover how much force or pressure is needed.

Activity for Preschoolers: *DIY Puzzle*

What You Need:

- Recycled card board (e.g., cereal or cracker box)
- Marker pen or crayons
- Scissors – both adult and child safety

What to Do:

1. Prepare a piece of cardboard for the puzzle by opening up the cereal or cracker box to form a flat surface and cutting off the extra sides.
2. Have your child draw and color a design or picture on the plain side of the cardboard. Encourage her to fill the entire surface.
3. On the design side of the cereal or cracker box, help your preschooler draw straight lines with a marker to create 3-5 pieces (more or less, depending on your child's ability).
4. If the cardboard is thin, let your child use child safety scissors to help snip on the lines. You may need to finish cutting the pieces for her.
5. Once all pieces are cut out, it's puzzle time!

(See page 5 for information on how doing these kinds of activities with your child helps her development and school readiness.)



How This Helps

The activities suggested in this newsletter help promote many different aspects of development:

Physical Development

- ♥ Engage in a variety of sensory experiences
- ♥ Develop control of small muscles

Social and Emotional Development

- ♥ Develop a concept of self
- ♥ Develop competence in self-help skills

Language and Literacy Development

- ♥ Make motions to songs and fingerplays
- ♥ Tell story about own drawings

Cognitive Development

- ♥ Develop understanding of how things work
- ♥ Use a variety of materials to create own artwork



Kids in the Kitchen

Cooking teaches valuable lessons such as math (quantities, measurement), science (how matter changes), fine motor (stirring, pouring), and literacy (print awareness). As you make this recipe with your child, talk about kitchen safety. Show her how to handle items safely and allow her to do as much as she is capable of. Praise her efforts, and ask questions throughout the process to encourage her thinking skills. Most of all, have fun!

Whole Wheat Letter Pretzels

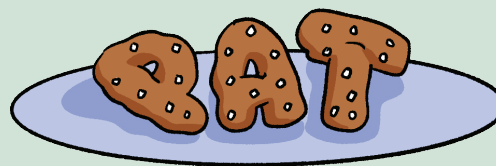
Adapted from: Teaching Young Children/Preschool, Vol 2, No 5 June/July 2009, Eat & Run, pg 32..

Ingredients:

- 1 tsp. instant yeast
- 1 Tb. honey
- 2 ½ - 3 cups whole wheat flour
- 1 tsp. salt
- 1 cup milk, warmed
- 1 egg, whisked
- Kosher (coarse) salt

Directions:

1. Combine first 5 ingredients in a large bowl. Stir with a wooden spoon until ingredients form a ball.
2. Sprinkle flour on a clean surface (e.g., large tray). Remove dough from bowl, place on tray, and knead for 5 minutes until dough has a smooth, satin-like texture.
3. Divide dough into 10 pieces and use hands to roll pieces into short logs. Cover the logs with a clean kitchen towel and let the dough rest for about 10 minutes.
4. Using both hands, gently pull each short log until it stretches to longer, thinner strips.
5. Help your child make the initials to her name on a non-stick cookie sheet. The strips will double in width while baking so allow enough space between the letters.
6. Use a pastry brush to brush the pretzel letters with the whisked egg. Then sprinkle tops with Kosher salt.
7. Bake in preheated 425 degrees oven for 15 minutes or until golden brown.



Resources

Fine Motor Skills for Children with Down Syndrome: A Guide for Parents and Professionals by Marianne Bruni

This guide provides parents and those who work with young children the confidence and support needed to help children build their fine motor abilities and become more independent.

Helping Preschoolers Prepare for Writing: Developing Fine Motor Skills

<https://openlab.bmcc.cuny.edu/ece-110-lecture/wp-content/uploads/sites/98/2019/11/Huffman-Fortenberry-2011.pdf>

This article provides simple activities to engage children at different levels fine motor development in preparation for writing.

Learning to Write and Draw

<https://www.zerotothree.org/resource/learning-to-write-and-draw/>

This article by Zero to Three provides



developmental information on the stages of writing from 15 months to 5 years of age, and how a child's writing and art changes over time, as well as how to encourage art and writing skills.

Suggested Books

Discover these books and more at the **Hawai'i State Public Library** www.librarieshawaii.org.

Infants and Toddlers

***Hand, Hand, Fingers, Thumb* by Al Perkins**

Fun illustrations and rhyming text describe what can be done on a drum with a hand, fingers and a thumb.

***Marc Brown's Favorite Finger Rhymes* by Marc Brown**

Marc Brown illustrates eight of his favorite finger rhymes including, "I'm a Little Teapot" and "Two Little Monkeys." Follow along the playful illustrations and diagrams.

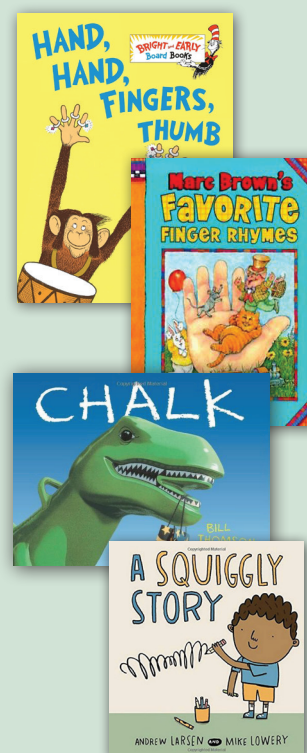
Preschoolers

***Chalk* by Bill Thomson**

A wordless picture book story of three children who go to the park on a rainy day, find some chalk and draw pictures that come alive.

***A Squiggly Story* by Andrew Larsen and Mike Lowery**

With the help of his big sister, a young boy learns to write a story. He starts with a single letter then adds some lines and his story grows. He discovers that we all have what we need to write a perfect story with a beginning, middle and an end.



Learning to Grow is a project of the University of Hawai'i, Windward Community College, with funding from the Hawai'i Department of Human Services. Visit our website at www.learningtogrowhawaii.org or visit us on Facebook at www.facebook.com/learningtogrowhawaii