

# FINE MOTOR SKILLS

## EDUCATIONAL HANDOUT

### What is fine motor skills?

Fine motor skills are movements involving the small muscles in the fingers, hands, and wrists.

### Why is fine motor skills important?

Fine motor skills are needed for the child's daily school, play, and self-care tasks. Fingers and hands allow a child to wash hands, color, eat, and hug parents. A child with fine motor struggles may have a poor attitude with learning in school, feel frustrated when unable to do a task by themselves, and have poor self-esteem when unable to do a task that their friends or family members can.

### What does research say?

- 5-10% of children in elementary school have delays with fine motor skills.
- Children require exposure to a variety of fine motor activities to build their finger and hand strength.
- Fine motor skills are closely connected with cognitive development.

**Fine motor skills are made up of several components that involve the fingers and hands. For example:**

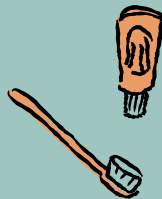
#### Strength

Use the right amount of strength in fingers and hands to do a task.

Examples:



- Open and close scissors



- Squeeze toothpaste onto a toothbrush

#### Precision

Smooth coordination and movement of the finger and hands.

Examples:



- Write words on lines

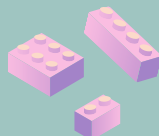


- Button a shirt

#### Bilateral hand coordination

Coordinated use of both hands working together.

Examples:



- Pull apart Legos



- Hold a ball

## A child with fine motor problems may look like or experience:

- Messy schoolwork
- Poor handwriting
- Scribble when drawing or coloring
- Take a long time to pick up small objects
- Hard time using both hands at the same time
- Avoid or hard time using fork and spoon
- Tire easily when doing a fine motor task, like playing, writing, and eating

## The following are some examples of activities for a child to improve fine motor skills:

### Squeeze and create something from play dough



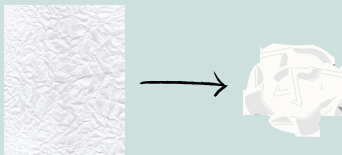
### Stack blocks



### Play with Legos



### Crumble paper



### Rip paper



### Pop bubbles



**For more information or concerns about your child's fine motor skills, please consult your child's occupational therapist or contact your pediatrician. You may also refer to [www.aota.org](http://www.aota.org) for additional information.**

### References

- Brons, A., de Schipper, A., Mironcika, S., Toussaint, H., Schouten, B., Bakkes, S., & Krose, B. (2021). Assessing children's fine motor skills with sensor-augmented toys: Machine learning approach. *Journal of Medical Internet Research*, 23(4), 1-12. <https://doi.org/10.2196/24237>
- Caramia, S., Gill, A., Ohi, A., & Schelly, D. (2020). Fine motor activities in elementary school children: A replication study. *American Journal of Occupational Therapy*, 74(2), 1-7. <https://doi.org/10.5014/ajot.2020.035014>
- Case-Smith, J., & Exner, C. E. (2015). Hand Function Evaluation and Intervention. In Case-Smith, J., O'Brien, J. C. (Eds.), *Occupational Therapy for Children and Adolescents* (7th ed., pp. 220-257). St. Louis, MO Elsevier.
- Cuffaro, M. (2011). Fine Motor Skills. In Goldstein, S., Naglieri, J.A. (Eds.), *Encyclopedia of Child Behavior and Development*. Springer
- Michael, M. (2016). Fine Motor. In Gale (Eds.), *Gale Encyclopedia of Children's Health: Infancy Through Adolescence* (3rd ed.). Gale.
- Marr, D., Cermak, S., Cohn, E. S., & Henderson, A. (2003). Fine motor activities in Head Start and kindergarten classrooms. *American Journal of Occupational Therapy*, 57(5), 550-557. <https://doi.org/10.5014/ajot.57.5.550>