

# Why Are They Important?

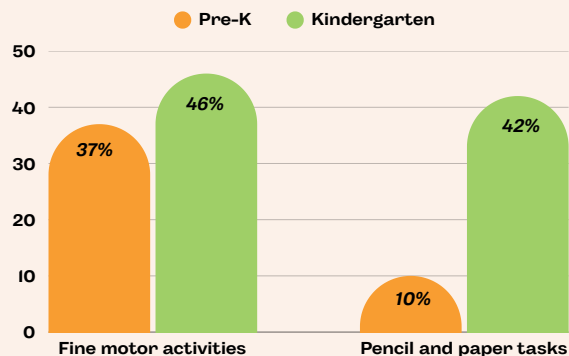
## Activities of Daily Living

Fine motor skills are used for daily activities, including:

- Dressing (button, snap, lace, and tie)
- Using tools (drawing with a pencil or cutting with scissors)
- Eating with utensils
- Playing with toys <sup>1,2,3</sup>





## Transition to Kindergarten

Fine motor skills allow students to complete self-help, manipulative, and handwriting tasks necessary for kindergarten readiness. Preschool students need to build muscle strength as they start this transition into kindergarten classrooms.<sup>5</sup>



**Table 1.** Percentage of fine motor and pencil and paper tasks in pre-kindergarten compared to kindergarten.<sup>5</sup>

Fine motor skills are also linked to:

-  School achievement and completion of assignments
-  Aspects of executive functioning
-  Positive self-esteem and self-expression
-  Gross motor strength

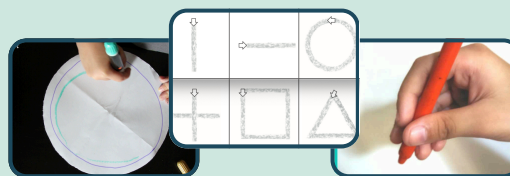
which can impact future academics beyond preschool and kindergarten.<sup>5</sup>

## Student Expectations

### Curriculum Shift

In recent years, student expectations have changed. One reason for this is the No Child Left Behind Act, which raised expectations for kindergarten readiness and test scores.<sup>5,6</sup>

Some classrooms now focus more on academics and less on play. This has led to more rising kindergarteners struggling with fine motor skills, which are important for school and life tasks.<sup>5,6</sup>



### Pre Writing

Fine motor skills help children with pre writing skills, such as copying a circle or coloring diagonally. While it is not developmentally necessary for preschoolers to write their name, they should be able to hold a crayon or pencil correctly and practice basic drawing and writing movements which will help with writing in the future.

## References

- (1) Case-Smith, J. (1996). Fine motor outcomes in preschool children who receive occupational therapy services. *American Journal of Occupational Therapy*, 50(1), 52–61.
- (2) Case-Smith, J. (2000). Effects of occupational therapy services on fine motor and functional performance in preschool children. *American Journal of Occupational Therapy*, 54(4), 372–380.
- (3) Case-Smith, J., Heaphy, T., Marr, D., Galvin, B., Koch, V., Ellis, M. G., & Perez, I. (1998). Fine motor and functional performance outcomes in preschool children. *American Journal of Occupational Therapy*, 52(10), 788–800.
- (4) Fine motor development chart. (2024). Kid Sense Child Development.
- (5) Lust, C. A., & Donica, D. K. (2011). Effectiveness of a handwriting readiness program in head start: a two-group controlled trial. *The American journal of occupational therapy*, 65(5), 560–568.
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## Fine Motor Skills in Preschoolers

### Why They Matter and How to Develop Them



# Developmental Milestones<sup>4</sup>

## Prior to 3

- Reaches, picks up, and releases toys
- Uses two and one handed grasp (palmar and pincer)
- Holds crayon with fingers (not a fist)
- Builds short block towers, scribbles, turns knobs and book pages
- Paints with arm and wrist movement
- Eats and drinks independently
- Shows hand dominance
- Imitates circular, vertical, and horizontal strokes on a paper

## Pre-K (3-4 years old)

- Copies circles, imitates crosses
- Builds block towers of nine small blocks
- Uses non-dominant hand to stabilize objects
- Snips paper with scissors
- Manipulates clay (rolls balls snakes)

## Pre-K (4-5 years old)

- Cuts on a line continuously
- Copies shape of cross and square, copies letters
- Writes name in large, uneven, or uppercase letters
- Writes numbers one to five
- Establishes a dominant hand
- Dresses and undresses independently

## Kindergarten (5-6 years old)

- Writes name legibly
- Cuts out simple shapes
- Copies triangle
- Colors within lines
- Uses a three finger grasp of pencil and uses fingers (not whole arm) to move it
- Pastes and glues appropriately
- Draws basic pictures

## Tips

### Daily Practice

Encourage daily fine motor development through fun activities. Daily practice will support self-care skills (eating, dressing), drawing skills, hand strength, manipulation of small objects, and pre writing development.

### Tools

Provide child tools like chunky crayons or adaptive scissors to limit frustration during tasks

### Patience

Every child develops at their own pace

### Technology

Limit screen use to promote hands-on play to build the hand and finger muscles

## Activities to Try



**Playdough**

hand strength, using two hands



**Beading**

in-hand manipulation, using two hands



**Scissors**

hand control, using two hands



**Painting/Coloring**

grasp on tools, hand control



**Blocks**

hand control, dexterity



**Nuts and Bolts**

in-hand manipulation, using two hands

## What Are Fine Motor Skills?

### Precise Movements

The precise movement of small muscles in the hands and fingers

### Daily Tasks

Allow children to perform tasks like grasping, writing, and buttoning clothes

### Development

Fine motor skills start to develop in infancy and continue to define as children age

### Main skills in preschool include:

- Grasp
- Using two hands together
- Hand strength, hand control, dexterity
- In-hand manipulation (moving objects within one hand)
  - This is the most complex and has three parts:



### Translation

- bringing objects from fingertips to palm (picking up a coin and holding it in the palm)
- bringing objects from palm to fingertips (putting the coin into a vending machine)
- holding objects in the palm while moving the fingers (holding other coins in palm while inserting one into the machine)



### Rotation

- turning an object at the fingertips (unscrewing a cap or turning a paper clip)



### Shift

- moving an object in a line on the fingers (picking up a pencil at the end and sliding your fingers to get ready to write)