

A Parents' Guide

To Early Brain Development And Its Importance For Kindergarten Readiness

The first years of life are among the most important for brain development, and there is much that you as a parent can do during these earliest years to give your child every advantage possible.

During the first months of life, babies' brains are growing and developing in ways that establish the foundation for their lifetime well-being. Trillions and trillions of connections are forming within your infant's brain.

A baby's brain is wired to learn, and a new parent is their child's first teacher.

Young children's brains develop in response to talking, touch, reading and play. Cuddle your new baby in your arms. Talk to her. Explain the world, and tell her that she is loved. Read to your baby. Tell him stories, and show him words and pictures. Newborns learn through play. Whether it's peekaboo or stacking blocks, playing together helps him learn. Let your baby know how much he is loved.

These early experiences establish the building blocks for language, thinking skills, self-control, and self-confidence.

These skills are key aspects of kindergarten readiness.





Congratulations on the new addition to your family!

While you are learning about your new baby, she is already busy learning about the world around her. Her developing brain is like a set of electrical circuits that become connected as she interacts with her environment. When she is nurtured with comforting words, smiles, lots of holding, and plenty of sleep, circuits within her brain associated with a safe and loving environment are strengthened. Some children develop more quickly, while some will develop more slowly.

Infants who are loved and nurtured have an easier time learning to express their thoughts and feelings. They have an easier time learning to manage their feelings and their temper. They have an easier time resolving conflicts through words. They are also more likely to develop a healthy love of learning and curiosity about the world around them. These social and emotional skills will serve them well in school and in life!

If young children spend their first years in environments that are violent or uncertain, their brains respond by strengthening circuits associated with fear, protection and survival, and allow circuits in other areas of the brain do not develop.

You hold the power to nurture your child's early brain development. The more your baby is exposed to new and positive experiences, the better!

Again, congratulations and all best wishes from our family to yours and to your new baby!

During the first year of a child's life, his brain will double in size. Much of this growth occurs in a part of the brain called the cerebellum, which is in charge of physical development and motor skills. This development helps babies learn to control their bodies and movement. They learn to hold up their heads, to roll over, grasp objects, and even to stand up. Meanwhile, the visual cortex, the part of the brain that helps us see, changes rapidly, and your baby starts to recognize faces.

Next, the limbic structure, the part of the brain that controls emotion and long-term memory, begins to develop, helping your baby become more aware of the world around him.

SIGNS OF HEALTHY DEVELOPMENT

- » Your baby loves to look into your face. He tries to mimic your expressions, and loves to play peek-a-boo.
- » He has a healthy appetite, and is growing between well-baby visits.
- » He responds to familiar faces.
- » He starts to babble and to make a range of impressive sounds.
- He starts to lift his head, to roll over, to crawl, and – closer to the end of the first year, pulls himself to a standing position.

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LANGUAGE AND LITERACY

Children are learning about language even during the first few months of life. Newborns use body language, sounds, and facial expressions to express their wants and needs.

What You Can Do to Help:

- ★ Talk softly to your baby in a calm and soothing voice using normal speech and words.
- ★ Respond to your baby's sounds.
- ★ Show delight when she coos and babbles.
- ★ Use your baby's name when you speak.
- ★ Your baby's crying tells you she needs something.

THINKING SKILLS

During his first year, your baby is starting to learn about important ideas like cause and effect. He is also developing a sense of safety and security.

What You Can Do to Help:

- ★ Infants and toddlers learn through play. When your baby drops your keys, for example, she wants to see how you will respond.
- \star Play along with her to encourage her to explore and learn.
- ★ Be very patient and have a sense of humor when playing with your baby.

SELF-CONTROL

Newborns have very little, if any, self-control. It is natural for infants to fuss when they are frustrated. Their tantrums and cries just reflect their developmental stage, not that they are spoiled. Babies use crying as a way to let parents know that they need something. Your baby needs you to show your calm love and support.

What You Can Do to Help:

- ★ To encourage her self-control, it is helpful for you to stay calm and to show her how to act.
- ★ Your child won't be the first (or last) to cry at the grocery store, restaurant, or other very public place. Remain calm, try to sooth her, and walk outside with her if you have to.
- ★ Babies thrive on routine. When she can count on regular naptimes, cuddling, diaper changes and feedings, her level of self-control will begin to develop.

SELF-CONFIDENCE

Newborns begin to develop self-confidence when they feel loved and safe.

What You Can Do to Help:

- ★ Comfort your baby when she cries and respond to her needs.
- ★ Make her feel loved by holding her close and speaking softly to her.
- ★ Cheer for her and smile at her as often as possible. Let her know that she is adored.

SECOND YEAR 13-24 MONTHS

Between your child's first and second birthdays he will begin to use more words. This is the time that language centers in his brain grow stronger. The result is that your child's vocabulary grows quickly as he approaches his twos.

The paths connecting his brain and nervous system are also growing stronger. He will be able to do harder tasks, and understand more complex ideas. This is also the time when he will become more aware or himself, and of his own emotions and goals.

SIGNS OF HEALTHY DEVELOPMENT

- » He becomes better at telling you what he wants and needs. He uses both words and gestures to let you know what he wants.
- » He wants to move around and explore and is less likely to sit still for more than a few minutes.
- » He will be interested in other children and in creative play.
- » He loves to be the center of attention of his friends and family.

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LANGUAGE AND LITERACY

At this time, your baby will start using a mix of gestures, sounds and words. By 18 months, your child most likely will be a master of two word sentences like "More Milk!" By 24 months, most children are able to use close to 200 words. At this age, your child will love to read stories together with you. Through stories, she is adding new words to her vocabulary, learning how words are connected, and how sounds and letters make words.

What You Can Do to Help:

- ★ Ask her about pictures in storybooks. "Who is this?" "What is that?"
- ★ Relate events in a book to personal experiences. "Does our cat act like the cat in this story?"
- ★ Hold her in your lap to share picture books.
- ★ Encourage her to talk about stories and her ideas.

THINKING SKILLS

For this age group, curiosity is king. Children between 1 and 2 test how things work. Will a cup bounce like a ball? Another sign of your child's developing thinking skills during this period is an interest in making tools — like standing on a box to reach toys on a high shelf.

What You Can Do to Help:

- ★ Make your home safe for him to explore. Babyproof cabinets, wall-sockets, and sharp corners so that he can safely explore his world.
- ★ Help him explore how things work by stacking cups and building with blocks.

SELF-CONTROL

Between her first and second birthday, your child will start to assert her independence more often. "No" will probably become her favorite word. Between 24 and 30 months, many toddlers have gained enough control and awareness of their bodies to start potty-learning.

What You Can Do to Help:

- ★ Praise her for using words to express her feelings and thoughts
- ★ Be patient. Very patient.
- ★ When she appears uncomfortable and fidgety, ask her if she needs to use the bathroom.
- ★ Walk her through the entire bathroom process: from undoing clothes to washing her hands properly. Celebrate her successes!

SELF-CONFIDENCE

During this time, children become even more interested in demonstrating their growing independence.

What You Can Do to Help:

- ★ Support your child's growing self-confidence by allowing her to do things "all by herself."
- ★ The outfit that she picks out to wear to school may not be what you would have picked, but she certainly will not be the first child to wear a cape to childcare.

THIRD YEAR 25-36 MONTHS

Before your toddler's third birthday, his brain growth shifts into another phase, as the brain areas in charge of more complex thinking and decision-making are growing most rapidly.

At this age, your child is beginning to use his memories and experiences to make sense of the present. He has a better understanding of the relationship between cause and effect and right and wrong. He starts to see how his actions affect other people and their feelings.

SIGNS OF HEALTHY DEVELOPMENT

- » He wants more freedom to play and explore.
- » He has better control of his body.
- » He is able to play with smaller toys (like puzzle pieces and crayons).
- » He understands more complex instructions.
- » He uses more and more words.
- » He joins his words together into longer sentences.
- » He is interested in other people, especially children his own age.

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LANGUAGE AND LITERACY

By age three, your child is putting together longer sentences, and using more words. Three year olds have favorite stories that they will want to read over and over. Young children learn how stories work through repetition. Three year olds also delight in rhyming words. These are important building blocks for learning to read and write.

What You Can Do to Help:

- ★ Encourage your child to make connections between different stories. (Read several stories about airplanes or farm animals, and ask your child about the similarities.)
- ★ Find songs and stories with rhymes. Encourage your developing poet!
- ★ Talk to her about what she is doing: "I really admire the way you give your dolly a bottle."

THINKING SKILLS

By his third year, your child is developing an understanding of pretend-play and he is beginning to understand that a word or symbol can stand for something else. His curiosity about letters and numbers during this period is an important kindergarten readiness skill and will help him learn to read and do math problems later.

What You Can Do to Help:

- ★ Play together to sort playthings by size or weight.
- ★ Sing the alphabet song, and play with magnetic letters and numbers.
- ★ Make a daily schedule (include naptime, play time, and story time).

SELF-CONTROL

At this age, your child develops a stronger understanding of how to use words to express her wants, needs and frustrations.

What You Can Do to Help:

- ★ Show her how to express her feelings in words.
- \bigstar Praise her for solving problems without yelling or hitting.

SELF-CONFIDENCE

Your child is continuing to develop his sense of independence and self-confidence. His self- confidence grows as she learns to get dressed on his own, and to brush his hair and teeth. He may take pride in putting away his toys or setting the table.

What You Can Do to Help:

- ★ Encourage her growing self-confidence by praising her for helping with small tasks.
- ★ At the same time, allow extra time for her to complete simple tasks, and be ready to gently redirect her when she becomes frustrated.

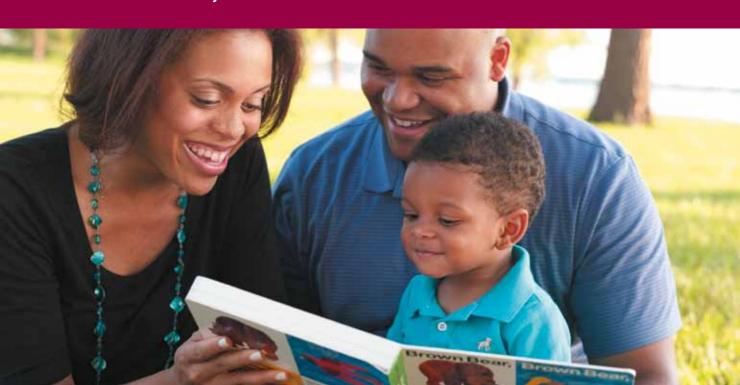


Kindergarten teachers and child development experts suggest that a new kindergartener should:

- Know his first and last name and his parent's first and last name.
- Recognize letters (both lowercase and uppercase) and numbers (up to 10).
- Know basic colors and shapes.
- Use the bathroom independently, dress and undress, and wash hands.
- Solve problems without hitting, biting, or yelling.

- Follow instructions from teachers and parents.
- Communicate wants and needs (like hunger, pain, happiness) through words.
- Be able to be apart from his parents during the school day.
- Sit quietly for short periods of time.
- Show curiosity and enthusiasm for activities like story or art time.

Practice these skills with your child often.





10 Things Every Child in Memphis Should Experience Before They Reach Kindergarten.

Children's Museum of Memphis

Children under 1 are FREE! Adults \$10 (May apply for free adult admission) Hands-on exhibits and programs for

2525 Central Avenue, Memphis, TN 38104 Phone 901-320-3171

Explore our other Museums (like the Pink Palace Museum, Lichterman Nature Center. The Brooks Museum of Art, The Ornamental Metal Museum, Stax Museum, and the Dixon Gallery and Garden).

The Pink Palace is free every Tuesday from 1 – 5pm. Set your own admission fee at the Brooks on Wednesdays. The Metal Museum is free for children under 5 and \$6.00 for adults. Stax is free every Tuesday from 1 – 5 for Shelby County residents. Admission to the Dixon is free Saturday mornings 10 till noon.

Peabody Ducks and **Main Street Trolley**

> Peabody Ducks FREE! Adult fare to ride the trolley is \$1.50. Join the ducks on their famous walk through the Peabody hotel lobby and enjoy the sights and sounds of the city from a real trolley car.

149 Union Avenue, Memphis, TN 38103 Phone 901-529-4000

My Big Backyard at the Botanical Gardens

Children under 2 are FREE! (Adults: \$8.00)

A family garden, playground, and children's museum all wrapped into one. 750 Cherry Rd., Memphis, TN 38117 Phone 901-576-4100

Memphis Zoo

FREE on Tuesday afternoons (Bring your TN driver's license or other form of ID). One of the best zoos in the United States.

2000 Prentiss Place, Memphis, TN 38112 Phone 901-576-4100

Shelby Farms, Wolf River Trails, and the Green Line

Free!

At 4,500 acres, Shelby Farms is one of the largest parks in the United States. Visit ponds, playgrounds, hills, meadows, horse stables, and forests. For pleasant hikes and bike rides, take one of the Wolf River Trails or the Green Line path.

North Pine Lake Drive, Memphis, TN 38134 Phone 901-767-7275

Get a library card

Library cards are free for residents of Memphis, Bartlett and unincorporated Shelby County (bring your TN driver's

With their parents' permission, children can have their very own library card. Branches across the city. Phone 901-415-2700

8 Mud Island River Park

Children 4 and under are FREE (Adults - \$10.00) Explore the length of the Mississippi River without ever leaving the city. 125 North Front Street, Memphis, TN 38103

Phone 901-576-7241

Books from Birth FREE!

> Sign-up with Books from Birth to receive a FREE Children's book every month in the mail. www.booksfrombirth.org

Visit Your Elementary School

Schedule a tour of your neighborhood school with your little one so that he begins to get excited about the adventure to come.



www.theurbanchildinstitute.org

The Urban Child Institute 600 Jefferson Avenue Memphis, TN 38105

Phone 901.523.9199 Fax 901.523.2460





The Urban Child Institute is a nonprofit organization dedicated to the well-being of young children in Memphis and Shelby County. Specifically, our mission is to promote optimal brain development from conception to age three. In order to give children a fair start in life, our community must invest in their earliest years. The first three years are crucial for children's long-term development because of the importance of brain development during this period. www.theurbanchildinstitute.org

ADDITIONAL RESOURCES

Books from Birth

FREE Monthly Children's Books delivered to your home. www.booksfrombirth.org

Early Learning Guides

Tennessee Curriculum Standards www.tn.gov/education/ci/earlychildhood

Earned Benefits Memphis

This program helps families apply for available benefits and services in the Memphis area.

http://memphis.earnbenefits.org/page.php?pageID=539

HealthyChildren.org

www.healthychildren.org

Memphis Pass to Kindergarten Readiness

www.mcsk12.net/p3c/files/calendar%20 readiness%20 final.pdf

Mr. Chuck

www.wkno.org/pdfs/chuck_abook08.pdf

NYC Project Launch

FREE information on early childhood social and emotional development, general childcare information, and child safety. http://www.nyc.gov/html/doh/html/dc/child-wellness.shtml

Potty Training Guide for Parents

Free information for parents on how to teach their toddlers about toilet learning.

http://www.babycenter.com/toddler-potty-training-advice

Raising Children Network

www.raisingchildren.net.au

Shelby County Schools Immunization Requirements

A complete list of the vaccinations your child needs before they reach pre-kindergarten and kindergarten. http://www.scsk12.org/Registration/Immunization.html

Smart from the Start

www.tn.gov/education/smart/index.shtml

Smart Start & The North Carolina Partnership for Children, Inc.

www.hugh.ncsmartstart.org/category/readyschools/ for-communities/information-for-communities

Tennessee Department of Education

"Helping Your Child Grow" www.tnspdg.com/resources/products/HYCGBirth-3.pdf

Tennessee Food Stamp Program/EBT Card

This program provides nutritional assistance to low-income and/or unemployed families. http://www.tn.gov/foodstamps

Text4Baby

FREE Daily Parenting Tips Texted to Your Phone! www.Text4Baby.org

Touch, Talk, Read, Play.

www.theurbanchildinstitute.org/key-initiatives/touch-talk-read-play

Women, Infants, and Children (WIC)

WIC provides supplemental foods, health care referrals, and nutrition education for low-income mothers, infants and children up to age five who are at nutritional risk. http://www.fns.usda.gov/wic/

ZeroToThree.org

"School Readiness Tips and Tools"
www.zerotothree.org/child-development/school-readiness/
tips-tools-school-readiness.html