



**HORIZONS**

**PLAYSPACE**

# Infant Development and Play

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# Early Experiences

- From infancy on, play is an important part of a child's life.
- For babies, simple, playful interactions with adults help develop sturdy **brain architecture**, the **foundations of lifelong health**, and the building blocks of **resilience**.
- Through games and playful activities, children can practice and strengthen important **executive function** skills that will help them throughout their lives, including learning to focus their attention, strengthening their working memory, and developing basic self-control.





Learn how to boost your baby's brain from a Harvard Prof...



Watch later



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Did you know that the most important interaction  
you can have with your child is through play?



0:08 / 5:27 • Intro



YouTube



# Adverse Childhood Experiences

- If babies experience too many traumatic events, their brains become primed to react to the world in fear. It rewires their neural pathways and can have a lifelong negative impact.
- It becomes harder over time for infants and toddlers to access their cerebral cortex or “thinking brain.” They function from their limbic system instead. Some call this our “caveman brain.”
- Babies who don’t have consistent, loving support from adults in their lives are even more deeply affected by trauma.



## 0-6 Months

- Show baby interesting objects such as a brightly colored mobile or toy
- Talk to baby often to familiarize baby with your voice, respond when they coo and babble
- Place baby in different positions so they can see the world from different angles
- Let baby bring objects to mouth to explore and experience new textures
- Vary facial expressions and gestures so baby has the opportunity to imitate them
- Use a mirror or favorite toy to help your baby engage in and enjoy Tummy Time



## BRAIN-BUILDING THROUGH PLAY

# 6 Games to Play with Babies (6 months)

**Why is play important for babies?** It helps develop sturdy brain architecture, the foundations of lifelong health, and the building blocks of resilience.

Playful interactions with adults also help babies develop **executive function skills**. Hiding, finger play, and conversation games, like the ones below, teach them to focus attention, use working memory, and practice basic self-control.

When you play with a baby, **follow their lead!** Play games they show an interest in and, whenever possible, let *them* determine how long to play and when to move on to something else.

1



### Peekaboo!

Babies love hide-and-find games. This type of play challenges babies to remember who is hiding, and helps them practice basic skills of self-control! You can vary the game by having baby wait for you to reveal your face or letting baby control the timing.

2



### "Trot Trot to Boston"

Put baby on your knees, facing you. As you chant the words, bounce them gently up and down. You can be silly by saying the words very quickly or very slowly: "Trot trot to Boston, Trot trot to Lynn. Watch out little [baby's name] or you might fall in!"

3



### "Pat-a-Cake"

Sing "Pat-a-cake, pat-a-cake, baker's man. Bake me a cake as fast as you can! Roll it, and pat it, and mark it with a [first letter of baby's name], then put it in the oven for the baby and me!" Clap, roll, and pat baby's hands gently as you sing. Increase the speed as you repeat!

4



### Hiding Games

Hide a toy under a cloth, cup, or box and encourage baby to look for it. Once they can find it quickly, hide it, show baby that you moved it, and encourage them to find it again.

When baby finds the object, show excitement and say, "You found it!" Repeat the game as long as they seem interested. If baby turns away or fusses, try to figure out what their mood is telling you, or what they're interested in next. The game can change!

5



### Conversation Games

Six-month-old babies begin to make sounds like "ga," "ma," and "ba." Sit with baby facing you on your lap and make silly sounds. Take a pause and wait to see if baby "talks back." When they babble, squeal, or make a silly face, make the same sounds and face back.

Tell baby a story that is meaningful to you. You can tell them about the day they were born or an important event in your life. Along the way, stop and ask them questions. Even though you won't get "real" answers, baby will add their own colorful details.

6



### Fingerplays

Babies love songs and chants with simple hand motions. They can learn to copy motions and remember sequences, with practice. Some examples in English are *Eensy Weensy Spider* and *Where is Thumbkin?* Lots of other fun fingerplays can be found in many languages and cultures.

## 7-12 Months

- Play peek-a-boo
- Use a mirror to show faces to baby
- Provide baby with a safe environment to crawl and explore
- Place baby in a variety of positions such as on tummy, side, etc.
- Give baby opportunities to learn actions have effects, e.g. when they drop a toy and it falls to the ground
- Expose baby to a variety of age appropriate toys, e.g. balls, shape sorters, music toys, or common household items like pots and spoons



## BRAIN-BUILDING THROUGH PLAY

# 5 Games to Play with Babies (9 months)

**Why is play important for babies?** It helps develop sturdy brain architecture, the foundations of lifelong health, and the building blocks of resilience.

Playful interactions with adults also help babies build **executive function skills**. Imitation, hiding, and conversation games, like the ones below, teach them to focus attention, use working memory, and practice basic self-control.

When you play with a baby, **follow their lead!** Play games they show an interest in and, whenever possible, let *them* determine how long to play and when to move on to something else.

1



### "Dickory Dean"

Sit on the edge of a chair or couch and hold baby on your lap. Bounce baby up and down as you chant, "What's the matter with Dickory Dean?" Then lift baby up high and say, "He jumped right into the washing machine!" Bring baby back down to your lap and swish them side to side while saying, "Chug, chug, chug, chug" two times. Then, bounce baby and chant, "Nothing's the matter with Dickory Dean." Now, slowly say, "He dove in dirty..." and drop baby down between your knees. Finally, exclaim, "And he jumped out clean!" and lift baby up high again. Babies will learn to remember the game and anticipate the thrill of the movements!

2



### Baby See, Baby Do!

Make simple gestures in front of a baby—wave your hand, stick out your tongue, or blow a kiss. Babies love to copy adults by watching them, remembering what they do, waiting their turn, and then trying to imitate. Later, if the baby makes the gesture first, copy them back!

3



### Where Is It?

Find a safe object that makes noise—like a set of keys that jingle or a toy that makes music. Make the sound to get baby interested, then hide the object behind your back or under a blanket. Encourage baby to look for it, saying, "Where are the keys?" When baby finds the object, be enthusiastic and say, "You found it!" Try different hiding spots or different objects and repeat the game until baby loses interest.

4



### Boom!

Take turns dropping a small toy into a container. When the toy hits the bottom, say, "Boom!" This might make the baby laugh or clap in excitement. After a few times, drop the toy in the container, but don't say anything. The baby might try to say, "Boom!" or make another noise. If they do, respond by saying it back. Next, encourage baby to drop the toys in the bucket and say "Boom!" with you.

5




### Grocery Store Explore

At the market, point out and tell baby about the different foods you see. Or talk about what baby is pointing at or noticing. What type of food is it? What color is it? What does it taste or smell like? "I see red and green apples. I wonder if they taste sweet?" If baby makes sounds in response, listen attentively and keep the discussion going. Even though babies at this age can't respond in words, they still learn language skills by listening to you.



To see more brain-building play ideas for kids of all ages, visit:  
<https://developingchild.harvard.edu/brainbuildingthroughplay>

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## BRAIN-BUILDING THROUGH PLAY

# 5 Games to Play with Toddlers (12 months)

**Why is play important for babies and toddlers?** It helps develop sturdy brain architecture, the foundations of lifelong health, and the building blocks of resilience.

Playful interactions with adults also help toddlers build **executive function skills**. Imitation, hiding, imaginative, and container play games, like the ones below, teach them to focus attention, use working memory, and practice basic self-control.

When you play with a baby, **follow their lead!** Play games they show an interest in and, whenever possible, let *them* determine how long to play and when to move on to something else.

1



### Toddler See, Toddler Do!

Encourage a toddler to copy your actions while you play together. For example, place a few toy animals in a barnyard, some toy cars in a line, or stack some blocks and then knock them down. When baby does the same, give specific praise: "Wow! Look at that tower you built!" or "Nice work! The cars are lined up and ready to race!"

2



### Explore on the Floor

It's fun for babies to explore their surroundings, whether they are crawling, standing with support, or beginning to walk. Join a toddler for some playtime on their level, wherever that may be. Stretch out, sit down, or kneel on the floor near them and place pillows, couch cushions, or soft toys on the floor between you for "obstacles." Now, encourage them to explore and come to you. Toddlers might climb over the cushions, stack them, carry them, or even pretend to lay down and go to sleep. It's all play!

3



### "It's For You!"

One year olds are beginning to understand the concept of imaginary play. A simple way to encourage them is by holding a toy (or a banana, a shoe, or even just your hand) up to your ear and pretending to talk on the phone with a family member or friend. After your pretend call ends, make a ringing sound, but this time when you "answer" the phone, tell the toddler that it's someone calling for them! Hold the "phone" up to their ear and prompt them to say "Hello" and chat away.

4



### Dump and Fill

Toddlers love to put items into a container and dump them out over and over again. (You've probably seen a toddler empty out a laundry basket full of clean clothing or a bin full of toys that you just put away!) Encourage and redirect this fun activity by providing them with a variety of containers (such as empty mixing bowls, boxes, or baskets) and safe items to fill them up with, such as toys or socks.

5




### Simple Hide and Seek

At this age, toddlers may enjoy hiding themselves and listening to you search loudly for them while they track your location mentally. Keep the game exciting by exaggerating your movements and words, looking in silly places, and narrating your search: "Where is baby? Is baby under the table? Noooo. Is baby on the ceiling? Nooooo. Is baby behind the couch? Yes! I found you!"



To see more brain-building play ideas for kids of all ages, visit:

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# 0-3 Months

## Motor Milestones

- Lying on tummy, pushes up on arms
- Lying on tummy, lifts and holds head up
- Able to move fists from closed to open
- Able to bring hands to mouth
- Moves legs and arms when excited

## Communication Milestones

- Quiets or smiles in response to sound or voice
- Turns head towards sound or voice
- Shows interest in faces
- Makes eye contact
- Cries differently for different needs
- Coos and smiles

## Sensory Milestones

- Reaches for a toy held above their chest
- Lying on back, visually tracks a moving toy from side to side
- Lying on back, keeps head centered to watch faces or toys
- Able to calm with rocking, touching, and gentle sounds
- Enjoys a variety of movements

# 4-6 months

## • **Motor Milestones**

- Uses hands to support self while sitting
- Rolls from back to tummy and tummy to back
- While standing with support, accepts entire weight with legs
- Reaches for nearby toys while on tummy
- While lying on back, reaches both hands to play with feet
- While lying on back, transfers a toy from one hand to the other

## • **Communication Milestones**

- Reacts to sudden noises or sounds
- Listens and responds when spoken to
- Begins to use consonant sounds in babbling, e.g. “da, da, da”
- Makes different kinds of sounds to express feelings
- Notices toys that make sounds
- Uses babbling to get attention

## • **Sensory Milestones**

- Uses both hands to explore toys
- Generally happy when not hungry or tired
- Brings hands and objects to mouth
- Able to calm with rocking, touching, and gentle sounds
- Is not upset by everyday sounds
- Enjoys a variety of movements

# 7-9 months

## • **Motor Milestones**

- Sits without support
- Sits and reaches for toys without falling
- Moves from tummy or back into sitting
- Starts to move with alternate leg and arm movement
- Picks up head and pushes through elbows during Tummy Time
- Turns head to visually track objects while sitting
- Shows more control while rolling and sitting
- Picks up small objects with thumbs and fingers
- In simple play imitates others

## • **Communication Milestones**

- Uses increased variety of sounds in babbling
- Looks at familiar objects and people when named
- Recognizes sound of their name
- Participates in two-way communication
- Follows some routine commands when paired with gestures
- Shows recognition of commonly used words
- Simple gestures, e.g. shaking head for “no”
- Imitates sounds

## • **Sensory Milestones**

- Enjoys a variety of movements – bouncing, rocking
- Explores and examines an object using both hands and mouth
- Turns several pages of a chunky book at once
- Experiments with the amount of force needed to pick up different objects
- Focuses on objects near and far
- Investigates shapes, sizes, and textures of toys and surroundings
- Observes environment from a variety of positions – while lying on back or tummy

# 10-12 months

## Motor Milestones

- Pulls to stand and cruises along furniture
- Stands alone and takes several independent steps
- Moves in and out of various positions to explore environment and get desired toys
- Maintains balance in sitting when throwing objects
- Claps hands
- Releases objects into a container with a large opening
- Uses thumb and pointer finger to pick up tiny objects

## Communication Milestones

- Meaningfully uses “mama” or “dada”
- Responds to simple directions, e.g. “Come here”
- Produces long strings of gibberish in social communication
- Says one or two words
- Imitates speech sounds
- Babbling has sounds and rhythms of speech
- Pays attention to where you are looking and pointing
- Responds to “no”
- Begins using hand movements to communicate wants and needs, e.g. reaches to be picked up

## Sensory Milestones

- Enjoys listening to songs
- Explores toys with fingers and mouth
- Crawls to or away from objects baby sees in the distance