

Introduction to Cognitive Development Domain for Mobile Infants

Domain Components:

CD1. Approaches to Learning

CD2. Executive Function

CD3. Logic and Reasoning

Here are some important things to know about mobile infants and their cognitive development.

- They are explorers of space and objects.
- ☐ They use their senses and a variety of actions to try new things.
- □ They repeat actions to produce a similar result (e.g. put objects in a container and dump them out over and over again).
- □ They begin to use a variety of strategies to solve problems.
- □ They begin to use realistic props in ways similar to everyday actions of others (e.g. talk on a toy phone).
- They begin to have favorite toys to play with and favorite books they want read to them.
- □ They show increasing ability to attend to an activity such as the reading of a short, familiar story book or playing with toys for more than a brief time.

By knowing these special things about mobile infants, families and caregivers can better understand how to promote their cognitive development.

Here is what happens when families and other caregivers support the mobile infant's cognitive development:

- They are curious and willing to try new things
- They are persistent in approaching tasks
- They are becoming problem solvers.
- They can hold information in memory.
- They are developing the ability to focus and sustain attention.



CD Activity: "Bubble Wrap Journey"

Learning Goal: CD1.1 Shows curiosity and a willingness to try new things

You will need: Bubble wrap

Masking tape

Before you begin:

Securely tape bubble wrap to the floor.

Try this!

- Encourage a child to crawl or walk on the bubble wrap.
- Observe the child to see her reaction to the bubble wrap.
- Talk with the child about how the bubble wrap feels. Ask, "Does that bubble wrap feel bumpy on your feet?"
- Touch the bubble wrap with your hands and encourage the child to do the same. Again talk about how the bubble wrap feels.
- Take up the bubble wrap when children lose interest in walking or crawling on it.

Teacher Note: Securely dispose of the bubble wrap that you have taken up from the floor. **Never allow children to have bubble wrap to play with.**

Try this!

- Ask a store that sells wallpaper to give you wallpaper books with textured samples when the books are no longer in use.
- Cut out giant feet from samples of textured wallpaper.
- Tape the feet securely to the floor.
- Encourage children to crawl or walk on the feet.
- Observe the children to see their reaction to the textured wall paper feet.
- Talk with the children about the different textures, describing how they feel.

Take up the feet and dispose of the feet when children lose interest in them.



CD Activity: "Feeling Different Textures"

Learning Goal: CD1.1 Shows curiosity and a willingness to try new things

You will need: 3-by-3 inch squares of different textures of fabric such as velvet,

satin, corduroy, fur, and flannel

4-by-6 index cards, one per each square of fabric, plus 2

Rubber cement Hole punch Key ring

Before you begin:

Punch a hole in the top left corner of each card.

- Write on one card "Our Feely Book" and on another card, write "The End."
- Use the rubber cement to securely attach each fabric square to an index card and allow the cement to dry.
- Create a book by stacking the cards in order from title card to end card and secure them by inserting the key ring in the hole at the top of each card.

Try this!

- Invite a child to join you in looking at the book.
- Allow the children to look at the book and feel the different fabrics. Observe to see if the child seems to prefer one fabric over another.
- Talk with the child about how the fabrics feel. Use words such as smooth, soft and bumpy.

Try this!

Create another feely book using textured wallpaper samples.

Try this!

 Give children an opportunity to feel the texture of fruits such as the outside of a watermelon (smooth), the peeling of an orange (rough/bumpy), and the outside of a kiwi (fuzzy).



CD Activity: "Sensory Bottles"

Learning Goals: CD1.1 Shows curiosity and a willingness to try new things

CD1.2 Shows persistence in approaching tasks

You will need: Sturdy bottles such as Gatorade, whipping cream or single serve juice

(water and soda bottles are too flimsy to use)

Objects such as sequins, beads, small jingle bells, paper clips, satin

ribbon, confetti, and buttons

Super glue Strong tape

Before you begin:

Wash bottles and remove all labels

- Create sensory bottles (see suggested types listed below). Mobile infants especially like bottles that make noise.
- Superglue the caps on securely and cover with strong clear tape.
- Place bottles on low open storage shelf.

Try this:

- Observe mobile infants as they select and interact with the bottles.
- Join mobile infants as they are playing with the bottles. Pick up one of the bottles, shake it and say "I hear buttons in this bottle." "Look at all of the shiny things in this bottle. I see seguins and beads and shiny ribbon in this bottle."

Teacher Notes:

- Check the bottles each day to make sure the bottle caps are securely glued and taped.
- Sanitize bottles after toddlers have played with them.

Sound Making Bottles

 Place sound-making items such as buttons, jingle bells and paper clips in bottles and super glue and tape on the cap as directed above. Make 3 bottles, one with each of the sound-making items.

Shiny Bottles

• Fill a bottle with shiny objects such as sequins, beads and satin ribbon, leaving enough space so that the objects will move when mobile infants shake or roll the bottle. Super glue and tape on the cap as directed above.

Confetti Bottles

 Put several spoonsful of confetti in the bottle, add water and food coloring. Super glue and tape on the cap as directed above.



CD Activity: "Nesting Toys"

Learning Goals: CD1.2 Shows persistence in approaching tasks

CD3.1 Uses reasoning and planning ahead to solve

problems and reach goals

You will need: Nesting toys

Plastic containers and clean yogurt, cottage cheese and sour

cream containers that fit one inside the other

Set of 4 measuring cups that fit one inside the other

Before you begin:

Place three plastic containers of different sizes on the floor.

Try this!

- Invite a child who seems to be interested in the containers to come and join you.
- Allow the child to play with the containers before starting the activity.
- Begin the activity by pointing to each container and describing them as the "biggest", the "medium size one" and the "smallest."
- Hand the child the smallest container, saying "I'm giving you the smallest one".
- Place the medium size container inside the largest container and invite the child to place the smallest container inside the medium container.
- Extend the activity by placing the large container on the floor and inviting the child to place the medium size container in the largest one, then the smallest in the medium container.
- Allow children to play with the containers independently. Observe to see if they stack them one inside each other.
- Place the different nesting toys on a low open shelf so children can select them for play.

Try this!

 Involve children in stacking the yogurt, cottage cheese and sour cream containers, then knocking them down. Repeat the activity.

Teacher Note: This nesting toys activity is introducing the child to the Mathematical Thinking Domain (size)



CD Activity: "Dumping and Filling"

Learning Goal: CD1.2 Shows persistence in approaching tasks

You will need: Containers such as plastic dish pans or plastic food storage container

Recyclable containers such as empty oatmeal boxes, empty diaper

wipe containers, shoe boxes and paper bags

Plastic measuring cups

Small plastic balls (large enough so that they are not a choking hazard)

Before you begin:

• Place the wooden cubes in a dish pan.

Place the pan on the floor.

Try this!

- Invite a child who seems interested to join you.
- Allow the child to explore the cubes.
- Observe to see if the child takes the cubes out and then puts them back in the pan. If not, demonstrate and encourage the child to do so.
- Vary the activity by making available different containers and toys that lend themselves to dumping and filling.

Extend the activity:

- Place two dish pans on the floor, one with wooden cubes and one empty.
- Observe to see if the child puts the cubes in the empty pan and then repeats the
 activity. If not, encourage the child to try this by saying, "Callie, can you put the
 blocks in this empty pan?"
- Add measuring cups to the activity and observe to see if the child uses them for dumping and filling.

Teacher Note: This activity also supports the development of a child's fine motor skills. **PH2.1 Demonstrates fine-motor strength, control, and coordination** (hand-eye coordination)



CD Activity: "What's In the Bag?"

Learning Goal: CD1.1 Shows curiosity and a willingness to try new things

What you need: A brown paper sack, a small cloth bag or an adult sized tube sock

Before you begin:

- Gather up several familiar objects; a rattle, a soft toy, a set of plastic keys, block, ball, a big spoon, a car.
- Allow the child to explore the toys and materials.

Now try this!

- Begin by letting the child see you place a couple of the familiar objects into the bag.
- Shake up the objects as the child watches. Say, "I wonder what's in my bag?"
- Let the child touch the bag. Then let him put his hand down in the bag without peeking and feel the toys. As your child touches the objects, say, "Oh my! Let's see what you're touching?"
- Let him take it out and show it to you. Encourage him with your enthusiasm.
 "Surprise, there's your keys!" Talk about the toys.
- Continue to explore the contents of the bag.
- Repeat the activity as long as the child is interested.

Try this variation of the activity!

- Vary the objects from time to time. Use household and personal objects such as measuring spoons, a whisk, a small mirror or a brush.
- Vary the texture and sounds of the objects.



CD Activity: "Playing with Pots and Pans"

Learning Goals: CD1.1 Shows curiosity and a willingness to try new things

CD2.4 Holds and manipulates information in memory

You will need: One or two small pots with lids and a small toy

Before you begin:

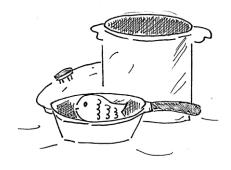
- Clear a spot for the child to sit on the floor to play with the pots and pans.
- Rattle the pots and pans and move the toy about to get the child's attention.
- Allow the child to explore the pots and pans and toy. Observe to see what she does with them.

Try this!

- Put the toy **IN** the pan. Then hold the pan for the baby to take it **OUT**. Praise the child for taking the toy out of the pan.
- Put the toy IN the pan and cover it with the lid. Let the child lift the lid to find the toy.
 Celebrate her success.
- Turn the pot over with the toy UNDER it. Say, "One, two, three, where can it be?" "Wee!" Celebrate when the toy is found.
- Hide the toy again and help your child look **UNDER** the pot to find it.
- Hide the toy under the pot and encourage the mobile infant to turn the pot **OVER** herself.

Try this!

- Vary the game by changing the toy
- Observe to see if the child plays the game without your presence.





CD Activity: "Finding Things"

Learning Goals: CD1.1 Shows curiosity and a willingness to try new things CD2.4 Holds and manipulates information in memory

You will need: Box or paper bag

Toy such as a ball

Try this:

• Put a ball in a box or paper bag as the child watches you.

- Ask the child, "Where is the ball? Can you find it?"
- Help the child take the ball out of the container.
- Encourage the child to put the ball back in the container and ask, "Can you find it?"
- Repeat the activity as long as the child remains interested.

Try this extension:

- Hide an object such as a stuffed animal somewhere in the room as the child watches you.
- Say to the child, "Vivian, go and find the bear."
- Cheer when the child finds it by saying, "Yeah, Vivian! You found the bear."
- Repeat this activity as long as the child remains interested.
- Extend the activity by putting the bear in a different place and ask the child to go and find the bear.
- Observe to see if the child goes back to the first hiding place. If so, encourage the child to look again, giving her clues as to where to find the bear.



CD Activity: "Where Is It?

Learning Goals: CD1.1 Shows curiosity and a willingness to try new things

CD2.4 Holds and manipulates information in memory

CD3.1 Uses reasoning and planning ahead to solve problems and

reach goals (object permanence)

You will need: Empty oatmeal box

Three matching containers such as cups or bowls

Toys (big enough so a mobile infant cannot swallow it)

Before you begin:

Cut out the bottom of an oatmeal box

Try this:

• Stand the box on end and invite a child to join you.

- Place an object through the top of the box and say to the child "Where is it?"
- Lift the box to and say "Here it is!"
- Repeat the activity.
- Invite the child to join in the game. Talk and guide him through the activity. Say, "Simon, drop the ball through the hole. Now can you find it?"
- Continue with this activity as long as the child remains interested.

Extend the activity:

- Place two matching containers on a table or on the floor and invite a child to join you.
- Place a small car under one of the containers as the child watches you.
- Ask the child, "Axel, where is it?" and allow him to find it.
- Repeat the game several times.
- Extend the activity for children who have mastered finding the toy under two containers by placing three matching containers on a table or on the floor.
- Place a small block under one of the containers as the child watches you.
- Ask the child, "Emma, where is it?" and allow her to find it.
- Repeat the game as long as the child remains interested.



CD Activity: "Watch It Roll!"

Learning Goals: CD1.1 Shows curiosity and a willingness to try new things

CD3.1 Uses reasoning and planning ahead to solve problems

and reach goals

You will need: You and a mobile infant, time together

Cardboard tubes from wrapping paper or a mailing tube, a stiff piece of

cardboard

Small plastic balls or Golf balls (large enough, so they won't be a choking

hazard)

Assorted small cars and trucks, a couple of small stuffed animals

Before you begin:

• Gather up the materials so that the mobile infant can experiment and problem solve. Remember: "Look, Listen, Say."

Allow the child to explore the tube, balls and other materials.

Observe what she does with them.

Try this!

 Show the child how to roll the golf ball down the empty wrapping paper tube or mailing tube.

- Watch the child's face for surprise when she connects the cause and effect of the ball rolling out the end of the tube.
- Listen for her excited reaction. Encourage her with your own excitement when the ball rolls out. Say, "Erin, look at what you did! Let's do it again."

Try this variation of the activity!

- Vary the activity by holding the tube level for a second, then tilting it the opposite direction.
- Make a ramp by leaning a piece of stiff cardboard up against a chair.
- Roll balls and little vehicles down the ramp.
- Let her try to "roll" a stuffed animal or a block down the ramp to see what happens.

Teacher Note: Closely supervise children so they do not throw balls and hit other children.





CD Activity: "Bubble Fun"

Learning Goal: CD1.1 Shows curiosity and a willingness to try new things

You will need: Liquid dish detergent

Glycerin

Bubble wands of various sizes and types

Containers for bubble solution

Before you begin:

Make a large recipe of bubble solution as follows:

- Pour 1 gallon of warm water into a large plastic container
- Add 1 cup of liquid dishwashing soap
- Add 1 tablespoon of glycerin
- Slowly stir the mixture, trying not to make suds
- Let the bubble mixture sit overnight
- Pour some of the solution in a container.
- Take the solution, bubble wands and mobile infants outdoors.

Try this!

- Dip the wand in the bubble liquid and blow gently, allowing the wind to move the bubbles.
- Move your whole body in a circle, with your arm rigid with the wand at the end of it (this works well with large wands).
- Observe children to see if they notice the bubbles. If they have not noticed them, call the children's attention to the bubbles. Say, "Look at the bubbles. They're all different colors."
- Observe to see if children try and catch the bubbles.
- Change the size of the wand and say to children, "I'm going to blow big bubbles now. Can you catch the big bubbles?"
- Show the children how to step on the bubbles to make them pop.



CD Activity: Sticky Pictures

Learning Goal: CD1.1 Shows curiosity and a willingness to try new things

You will need: Clear contact paper

Masking tape

Pictures of animals, people and familiar objects

Before you begin:

• Cut out magazine pictures of animals, people and familiar objects.

- Mount pictures on construction paper or poster board
- Cover the front and back of pictures with clear contact paper

Try this!

- Tape a piece of contact paper on the wall at child's level, sticky side out.
- Invite a child to join you as you place a picture on the contact paper.
- Suggest that the child place a picture on the contact paper.
- Observe the child's reaction. Does he seem surprised when the pictures stick to the contact paper? Ask, in an excited voice, "What happened? Did it stick?"
- Observe to see if the child tries to peel off the pictures. Does he continue to put the pictures on and take them off of the contact paper? Does he name the pictures?

Try these variations of the activity!

- Use fabric swatches that will stick to the contact paper. Collect swatches of different textures such as fake fur and corduroy.
- Use cotton balls.
- Use pictures of family members and pets.