

HEALTHY BABY MOTOR DEVELOPMENT 6-15 MONTHS



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OBJECTIVES



1. How do gross motor, fine motor, and sensory skills contribute to development?
2. What are the motor and sensory milestones for 6-15 months?
3. Gain tips for play ideas and healthy development

DEFINITIONS

GROSS MOTOR

Involves large muscle groups for skills such as rolling, sitting up, standing, walking, running, jumping, and climbing



FINE MOTOR

Involves smaller muscle groups of the hands and mouth for refined and specific movements, such as picking up small objects, holding and using a spoon, dressing, and handwriting



SENSORY

Refers to the brain's ability to receive, interpret, and effectively use information provided by all 7 senses: **vision, hearing, taste, smell, touch, the detection of movement (vestibular) and body position (proprioception)**



SENSORY AND MOTOR SYSTEMS

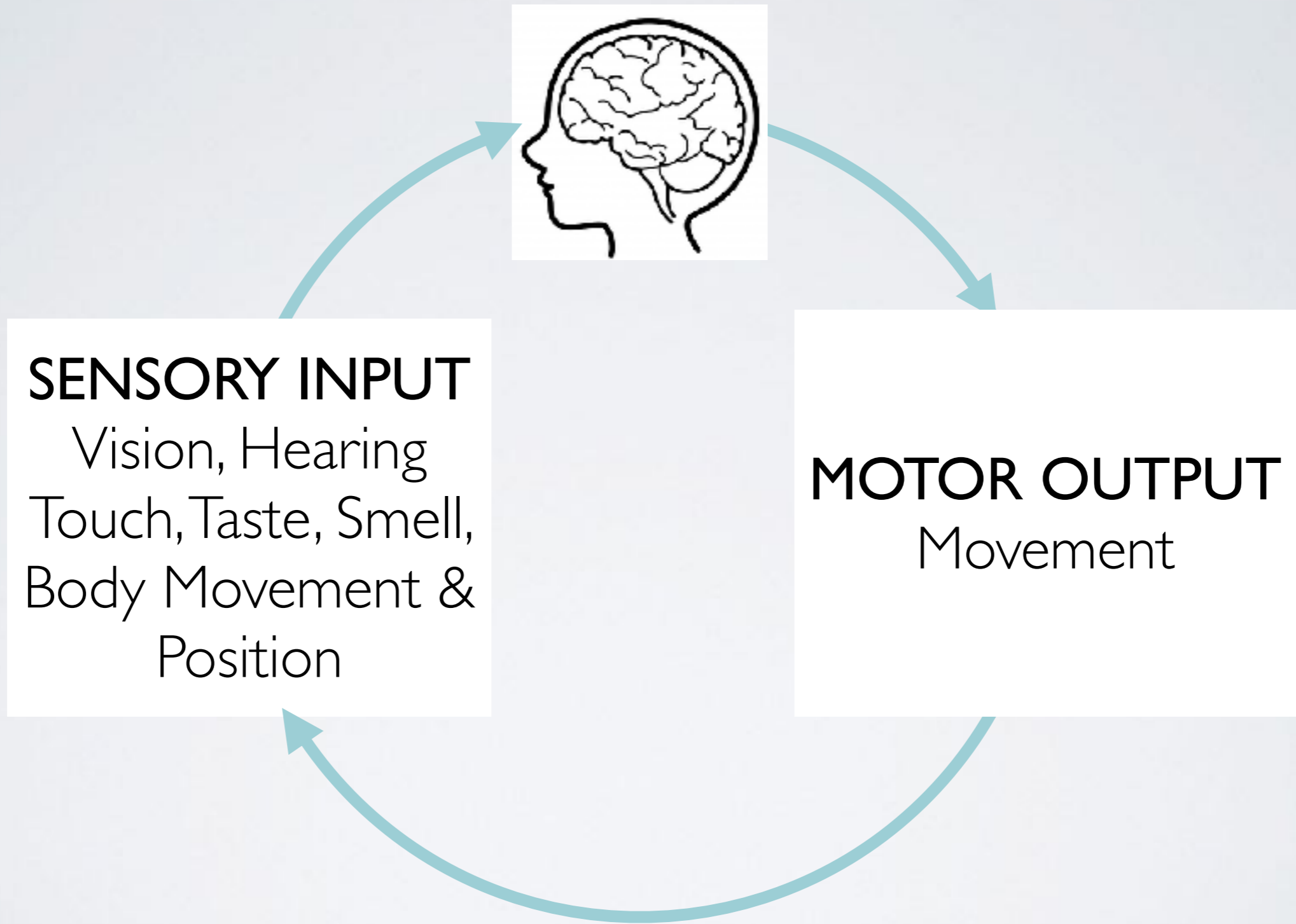


SENSORY INPUT

Vision, Hearing
Touch, Taste, Smell,
Body Movement &
Position

MOTOR OUTPUT

Movement



SENSORY AND MOTOR DEVELOPMENT

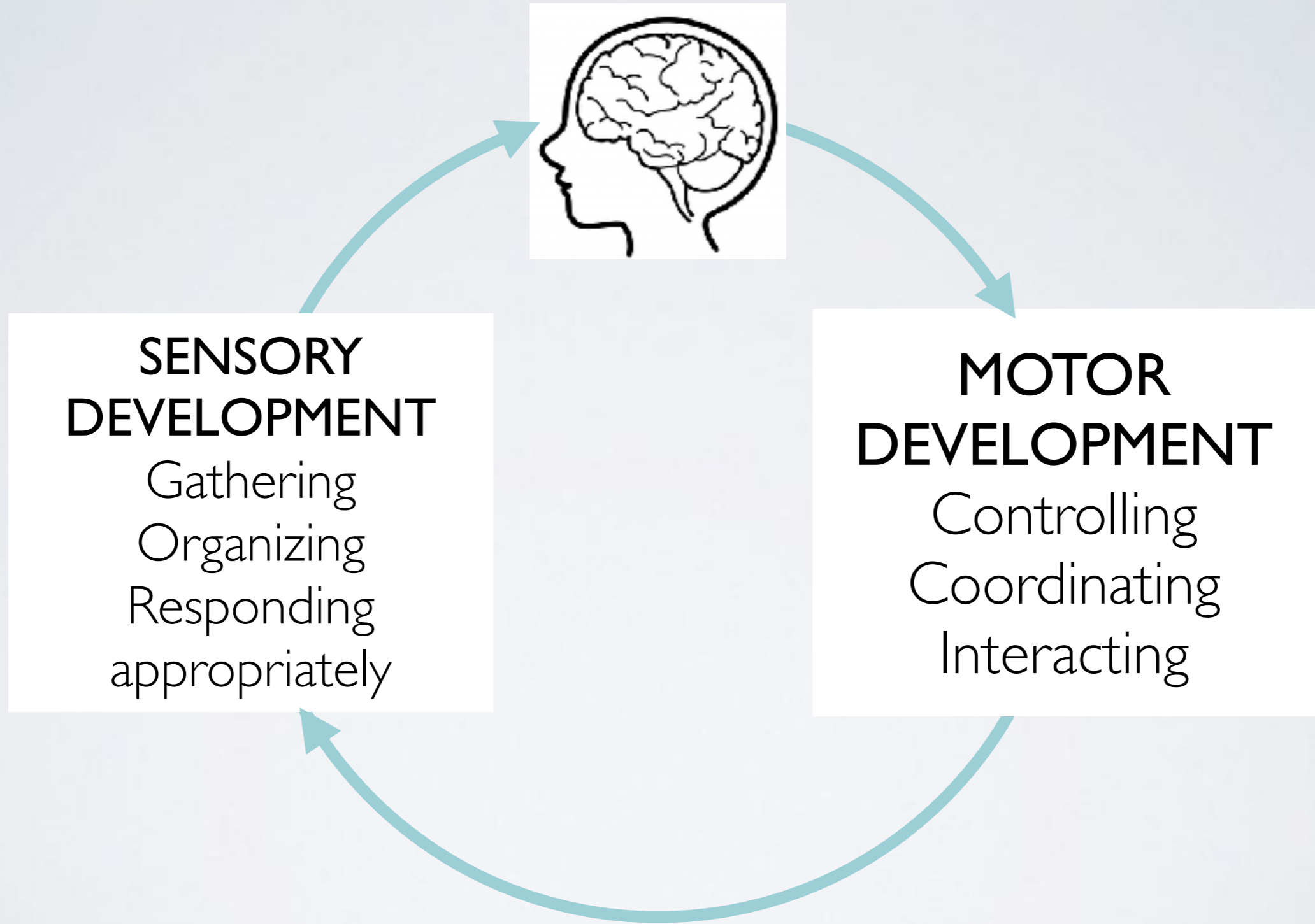


SENSORY DEVELOPMENT

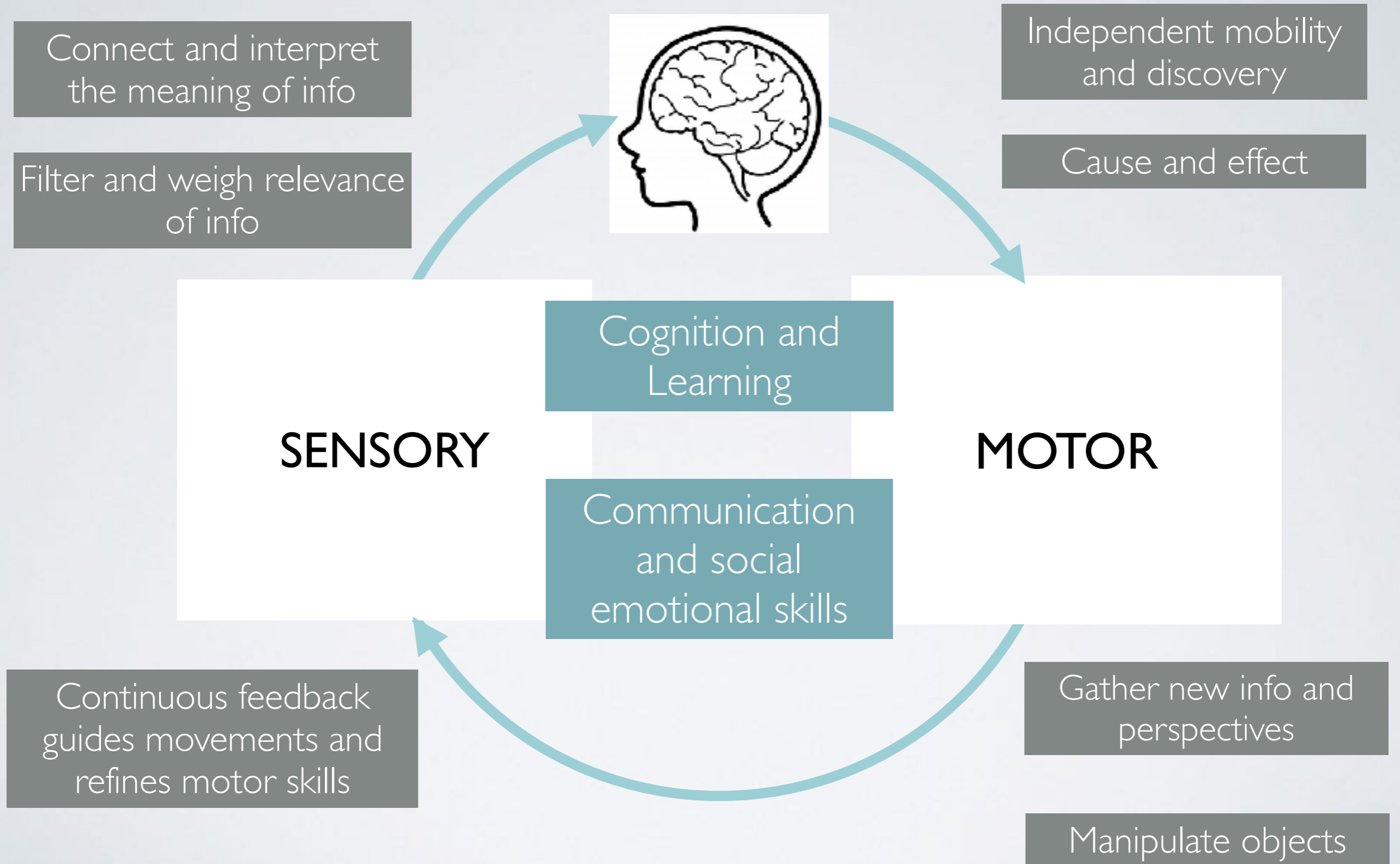
Gathering
Organizing
Responding
appropriately

MOTOR DEVELOPMENT

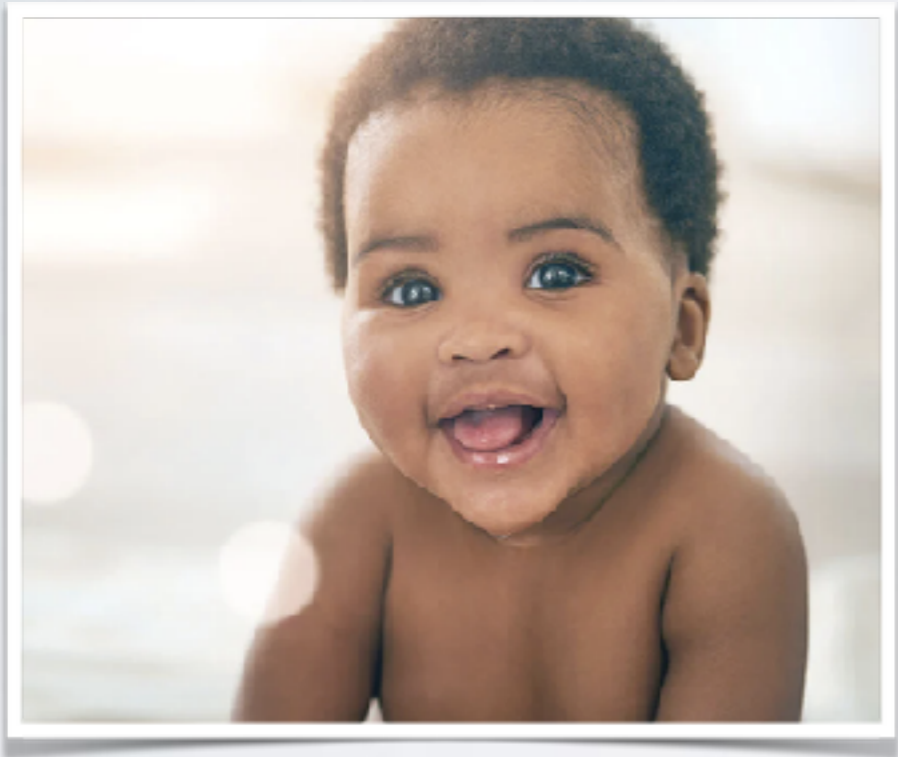
Controlling
Coordinating
Interacting



EFFECTS OF SENSORY AND MOTOR DEVELOPMENT



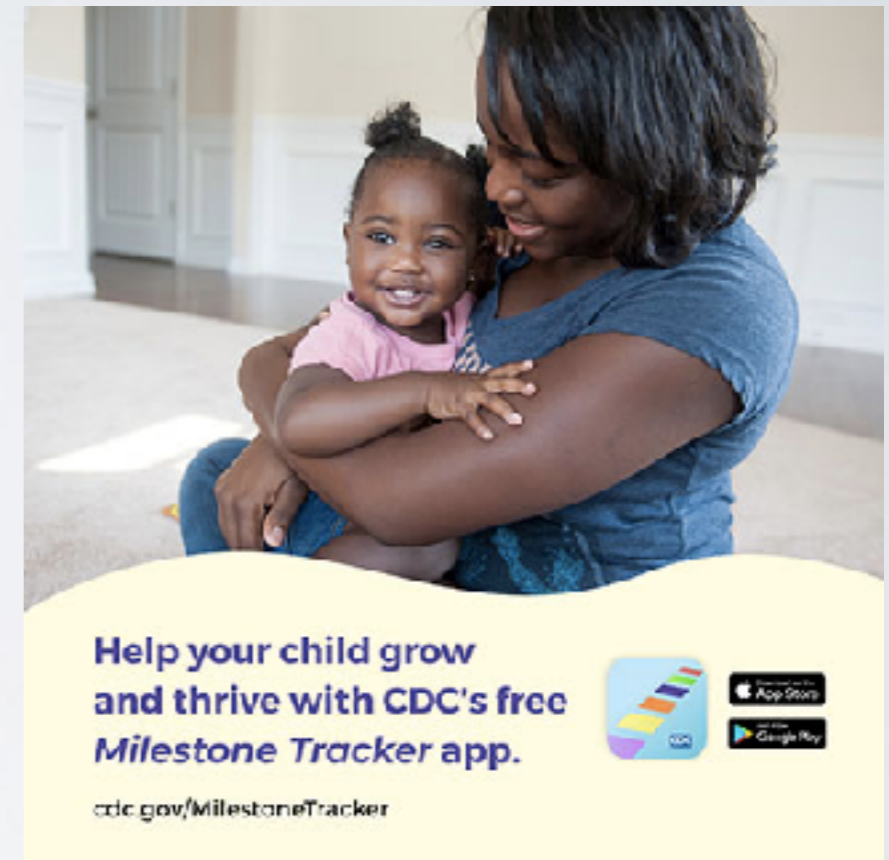
MOTOR MILESTONES



- Checkpoints for development
- Babies develop at their own pace and there is a range of normal
- Look at the big picture
- The goal of healthy physical development is full and independent participation in the activities that are meaningful to your child and your family

MOTOR MILESTONES

- The APA and CDC published new milestone checklists in 2022
 - Social/Emotional
 - Language/Communication
 - Cognitive
 - Movement/Physical Development Milestones
- New milestones are set at an age where at least 75% of children are expected to exhibit these skills
- Aim is to gain clarity on delays and reduce “wait and see”




3-6 MONTHS

GROSS MOTOR	FINE MOTOR	SENSORY
Rolls both ways	Reaches out for toys while on tummy	Babbles to get attention “ba, da, ma”
Pushes up on hands on tummy, pivots	Transfers a toy from one hand to another while playing on back	Tastes first soft foods
Uses hands to support self in sitting	Reaches with both hands to play with feet	Enjoys social play
Takes full weight on legs when in supported standing	Plays with hands together in midline	Mouths hands and toys


7-9 MONTHS

GROSS MOTOR	FINE MOTOR	SENSORY
Reaches out for toys in sitting without falling	Holds and drinks from a bottle in supported sitting	Looks when you call his/her name
Moves from tummy or back to sitting	Claps hands, bangs toys together	Eating thicker pureed, soft, and mashed foods
Moves with alternate leg and arm movements in creep or crawl	Turns pages of a board book	Looks at familiar objects and people when named
Pulls to standing at furniture	Imitates others in simple play	Smiles at self in a mirror

10-12 MONTHS

GROSS MOTOR	FINE MOTOR	SENSORY
Pulls to stand, cruises along furniture	Finger feeding, begins transition from bottle to open cup	Enjoys listening to songs
Stands alone	Releases object into a container with large opening	Explores toys and variety of food with fingers and mouth
Transitions independently between sit and stand	Uses pincer grasp (thumb and 1st finger) to pick up tiny object	Crawls to or away from objects seen in the distance
Takes a few steps independently	 A photograph of a baby sitting at a table, eating vegetables. The baby is wearing a pink bib and a striped shirt. They are holding a green vegetable in their right hand and reaching for a red vegetable with their left hand.	Enjoys variety of smells and tastes

13-15 MONTHS

GROSS MOTOR	FINE MOTOR	SENSORY
Walks independently faster, for longer distances, sideways, backwards	Stacks two objects or blocks	Regular sleep schedule
Squats to pick up toys, returns to stand	Helps with getting undressed	Tolerates/enjoys a wide variety of touch, textures, noises, food and smells
Transitions to stand without using hands	Holds and drinks from an open cup	
Crawls up and down stairs	Uses a palmar supinate grasp (fisted grasp) on writing or eating utensil, scribbles	

BABY PLAY!



IMPORTANCE OF PLAY



“To engage in activity for **enjoyment and recreation** rather than a serious or practical purpose.”

It is an activity that is **intrinsically motivated**, entails **active engagement**, and results in **joyful discovery**.

(Yogman et al, 2018)

Play is essential to development because it contributes to the **cognitive, physical, social, and emotional well-being** of children and youth.

(Ginsberg et al, 2007)

SETTING THE STAGE

- Introduce rich and varied sensory experiences
- Set up a YES space
- Place toys strategically
- Choose open ended toys that grow with baby
- Let baby learn through discovery, trial and error!



BABY GEAR?



SITTING PLAY

MINI MILESTONES

- Good head and trunk control on tummy and when carried upright
- Playing in a sidelying position
- Pushing up on straight arms on tummy

TIPS AND TRICKS

- Sit behind baby
- Back to a couch corner
- Soft landing zone to all sides
- Let baby wobble!



CRAWLING

MINI MILESTONES

- Swimming
- Prone pivot
- Rocking forward and back and side to side on hands and knees
- Bear stance or plank



TIPS AND TRICKS

- Tummy over your leg
- Toys that roll away like balls and cars



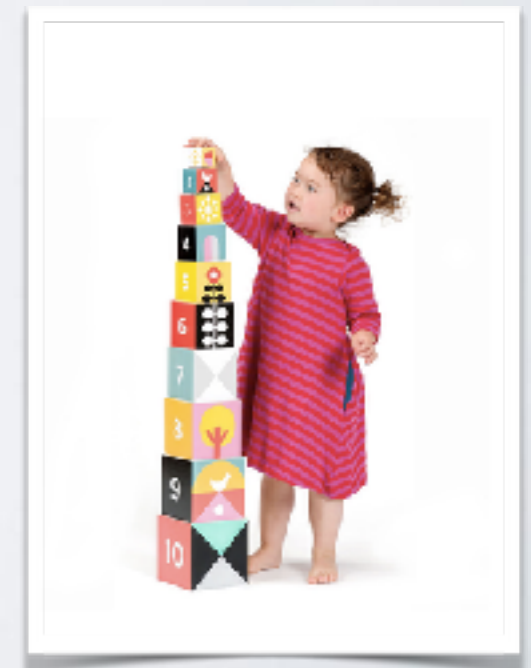
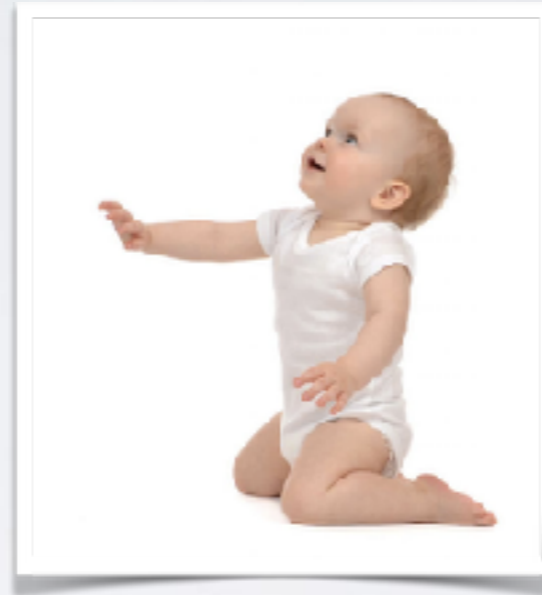
STANDING

MINI MILESTONES

- Tall kneeling and half kneeling
- Bouncing with hands held

TIPS AND TRICKS

- Back to the couch or couch corner
- Standing with hands free, legs touching a lower surface
- Playing at a vertical surface (squigz, magnet toys)
- Container play or basketball
- Knocking down and building stacking and nesting blocks



WALKING

MINI MILESTONES

- Independent standing
- Stand to squat
- Cruising at a variety of heights of horizontal surfaces, then vertical surfaces and around curves and corners
- Walking with one hand held

TIPS AND TRICKS

- Introduce push toys once cruising is established. Look for one with a heavy base and slow wheels
- Leave just a small gap between couch and ottoman to encourage one step
- Barefoot is best. When shoes are needed, choose thin, flexible soles with non slip grip.



CLIMBING STAIRS

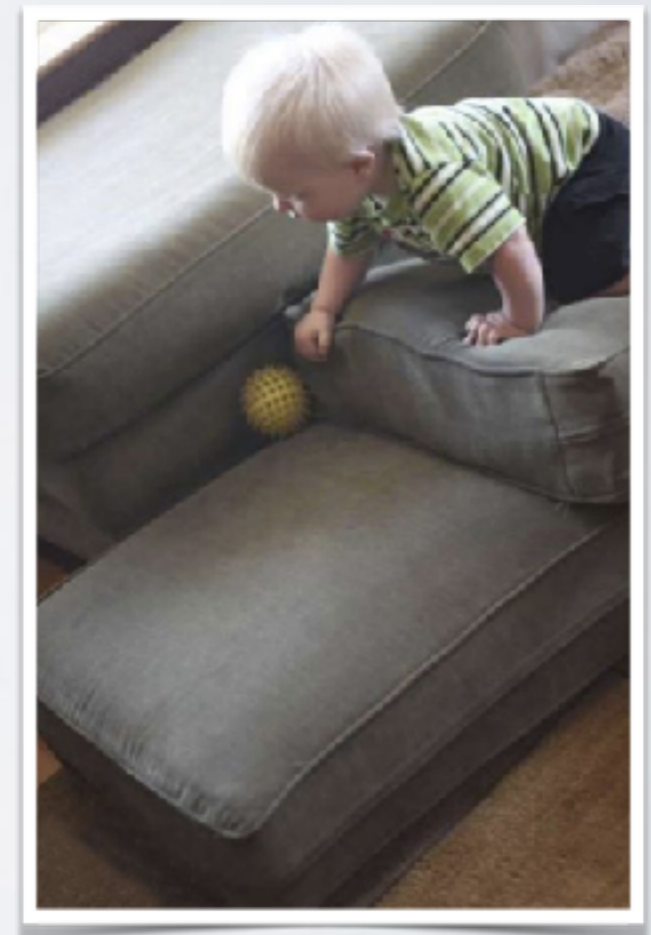
MINI MILESTONES

- Crawling
- Squat to stand



TIPS AND TRICKS

- Make a crawling obstacle course with pillows, soft toys, couch cushions, folded gym mats, tunnels, etc
- Be behind baby going up and in front of baby going down stairs for safety



SENSORY AND MOTOR RED FLAGS

- Loss of skills
- Overly sensitive (or very insensitive) to stimuli like loud noises, textures, pain, temperature, light, smells
- Difficulty lifting head, pushes head back forcefully
- Stiff arms and legs, hands fisted, very little movement
- Uses only one side of the body to move, strong hand preference
- Turns head or tilts to only one side, neck tightness, lump in neck muscles
- Flat spot on back or one side of the head
- Persistent difficulty with feeding, swallowing

CHILD DEVELOPMENT PROFESSIONALS

PHYSICAL THERAPISTS

Help kids reach independence and maximize participation by working on strength, flexibility, range of motion, posture, balance, coordination, and movement patterns



OCCUPATIONAL THERAPISTS

Work on daily life skills, such as handwriting, dressing, eating, taking part in social activities, and sensory integration

SPEECH LANGUAGE PATHOLOGISTS

Help improve communication tools (both verbal and non-verbal) and to tolerate sensory stimulation, executive function skills, feeding and swallowing



SUMMARY

- Sensory and motor development support one another and fuel cognition, learning, social emotional and communication skills
- GM, FM, and Sensory milestones for age 6-15 months
- Set up safe YES spaces for baby's expanding motor skills

SUMMARY

- Play is essential for development and well-being
- Play ideas to support crawling, standing, walking, and climbing stairs
- Red flags in development: don't just "wait and see!"
Check in with a pediatrician or specialist.

QUESTIONS AND DISCUSSION

REFERENCES

1. Ginsburg, K. and the Committee on Communications, and the Committee on Psychosocial Aspects of Child and Family Health (2007). The Importance of Play in Promoting Healthy Child Development and Maintaining Strong Parent-Child Bonds. Pediatrics, from The American Academy of Pediatrics, 119.
2. Yogman, M. et al, and the Committee on Psychosocial Aspects of Child and Family Health, Council on Communications and Media (2018). The Power of Play: A Pediatric Role in Enhancing Development in Young Children. Pediatrics, from The American Academy of Pediatrics Clinical Report, 142.

Motor Milestones from Standardized Assessments

Hawaii Early Learning Infant Profile

Peabody Developmental Motor Scales, Second Edition

Additional online resources

CDC Milestones <https://cdc.gov>

Pathways <https://Pathways.org>

CanChild <https://CanChild.ca>

American Academy of Pediatrics <https://Healthychildren.org>

Zero To Three <https://Zerotothree.org>

Your Kids Table www.yourkidstable.com

Can Do Kiddo www.CanDoKiddo.com

The Inspired Treehouse <https://theinspiredtreehouse.com/>



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