

HEALTHY BABY MOTOR DEVELOPMENT 12-24 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 and abilities for 12-24 months?
3. Gain tips for play ideas and healthy development

DEFINITIONS

GROSS MOTOR

Involves large muscle groups for skills such as rolling, sitting up, crawling, 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 8 senses: **vision, hearing, taste, smell, touch, the detection of movement (vestibular), body/joint position (proprioception), and inner body sense (interoception)**

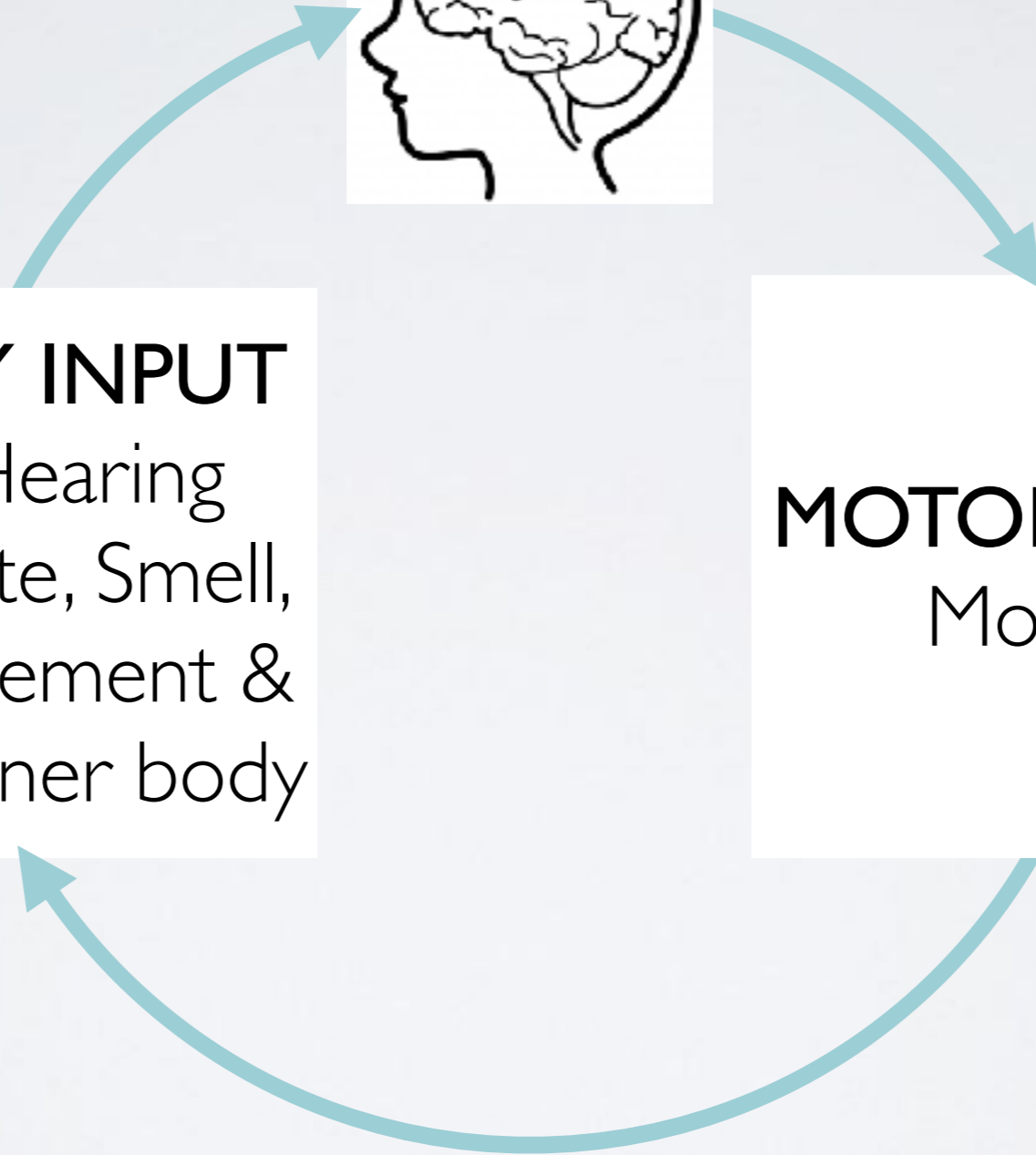


SENSORY AND MOTOR SYSTEMS



SENSORY INPUT
Vision, Hearing
Touch, Taste, Smell,
Body Movement &
Position, Inner body

MOTOR OUTPUT
Movement



SENSORY AND MOTOR DEVELOPMENT

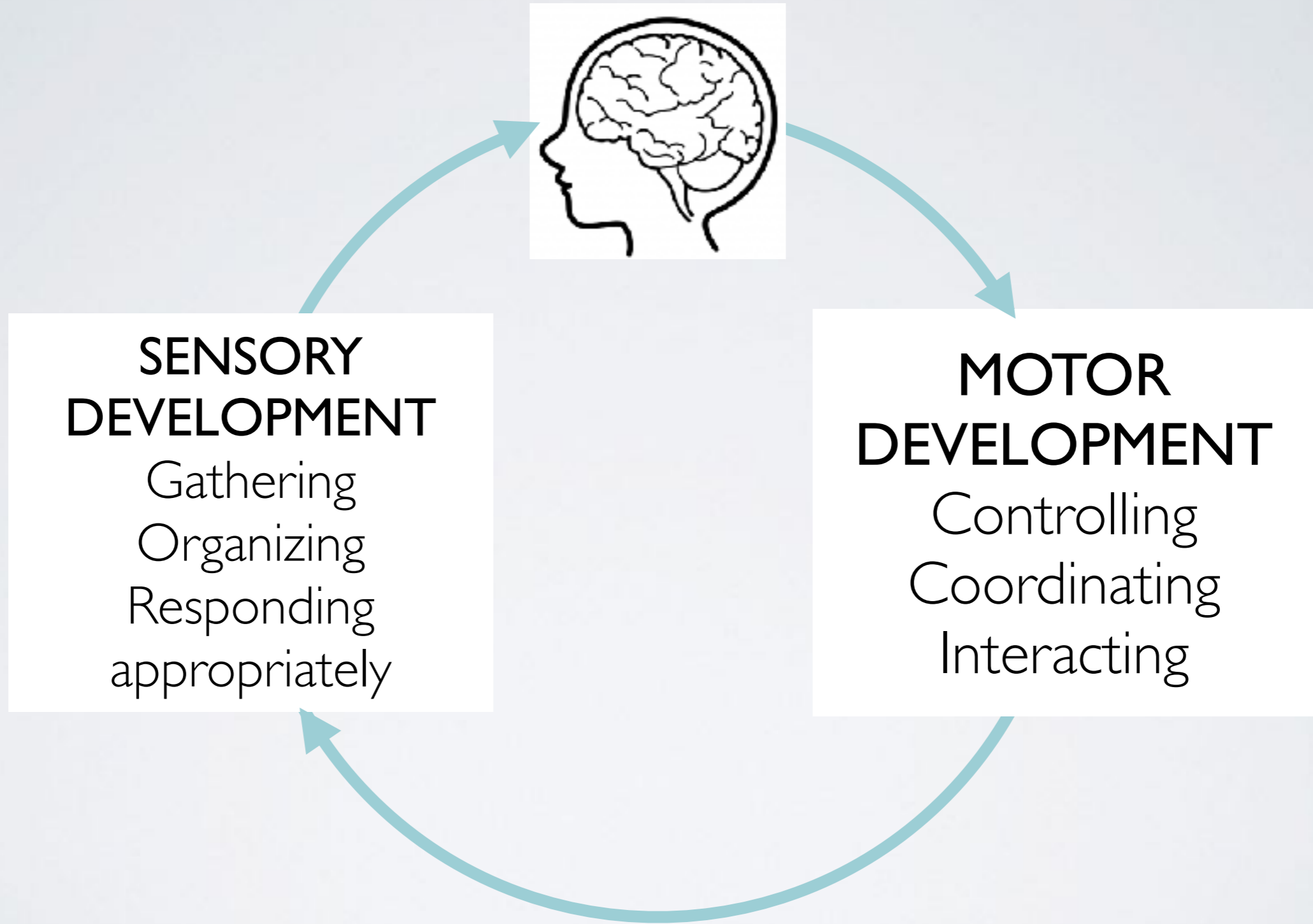


SENSORY DEVELOPMENT

Gathering
Organizing
Responding
appropriately

MOTOR DEVELOPMENT

Controlling
Coordinating
Interacting

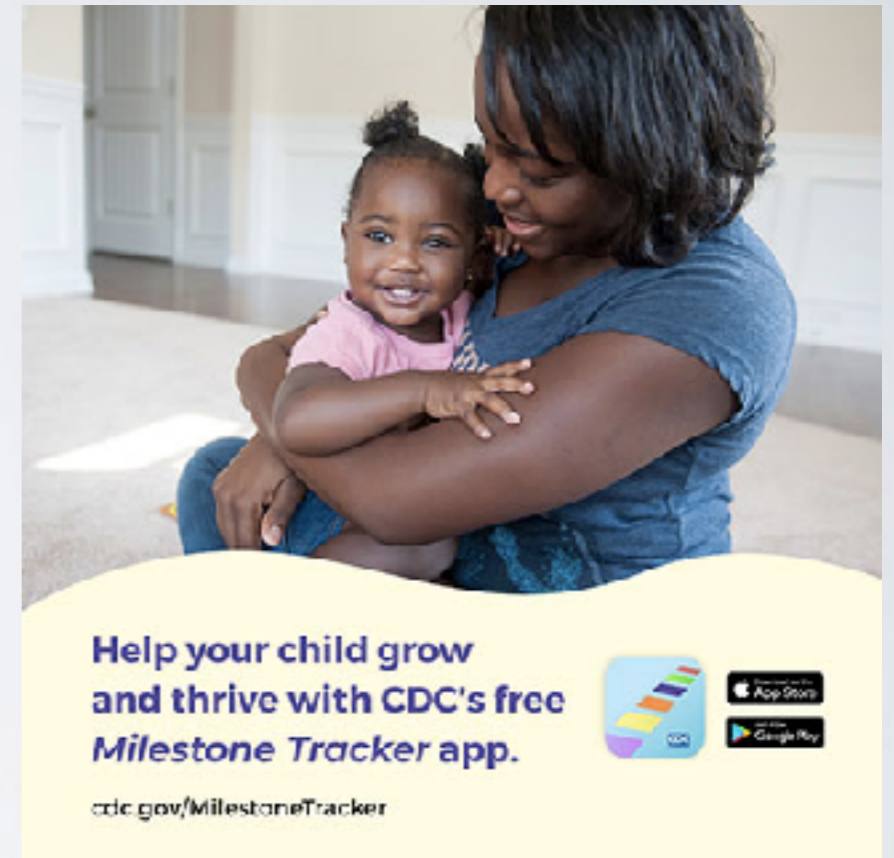


MOTOR MILESTONES

- The APA and CDC published new milestone checklists in 2022

- Social/Emotional
- Language/Communication
- Cognitive
- Movement/Physical Development Milestones

- New milestones are core skills: checkpoints 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”:
Talk to your pediatrician if any of these are missing



MOTOR SKILLS

Motor Skills/Abilities



- At an age when they are usually achieved, but there is individual variability and a wide range of normal
- Look at the big picture of development
- Gaps can help us to be intentional about purposeful play

The goal of healthy physical development is full and independent participation in the activities that are meaningful to your child and your family

10-12 MONTHS

GROSS MOTOR

Cruises along furniture



Stands alone



Transitions independently between sit and stand



Takes a few steps independently

10-12 MONTHS

FINE MOTOR

Finger feeding, begins transition from bottle to open cup

Releases object into a container with large opening

Uses pincer grasp (thumb and 1st finger) to pick up tiny object



10-12 MONTHS

SENSORY

Enjoys listening to songs

Crawls to or away from objects seen in the distance

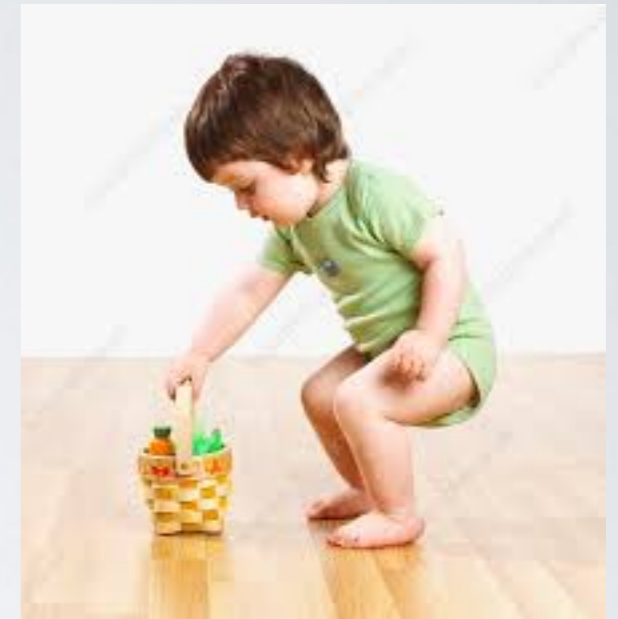
Enjoys wider variety of smells and tastes



12-14 MONTHS

GROSS MOTOR

Crawls up steps



Picks up a toy from the floor from standing

Walks while holding one hand



Takes a few steps independently

12-14 MONTHS

FINE MOTOR

Points and pokes with index finger



Starts to scribble (fisted grasp)

Places object into a small container



Stacks a block on top of another block

12-14 MONTHS

SENSORY

Responds to simple verbal requests



Finds toy hidden behind something else



Says “no” meaningfully

Attempts to sing



15-18 MONTHS



GROSS MOTOR

Climbs up and down from furniture

Walks quickly

Walks up and down steps with support

Walks backwards

15-18 MONTHS



FINE MOTOR

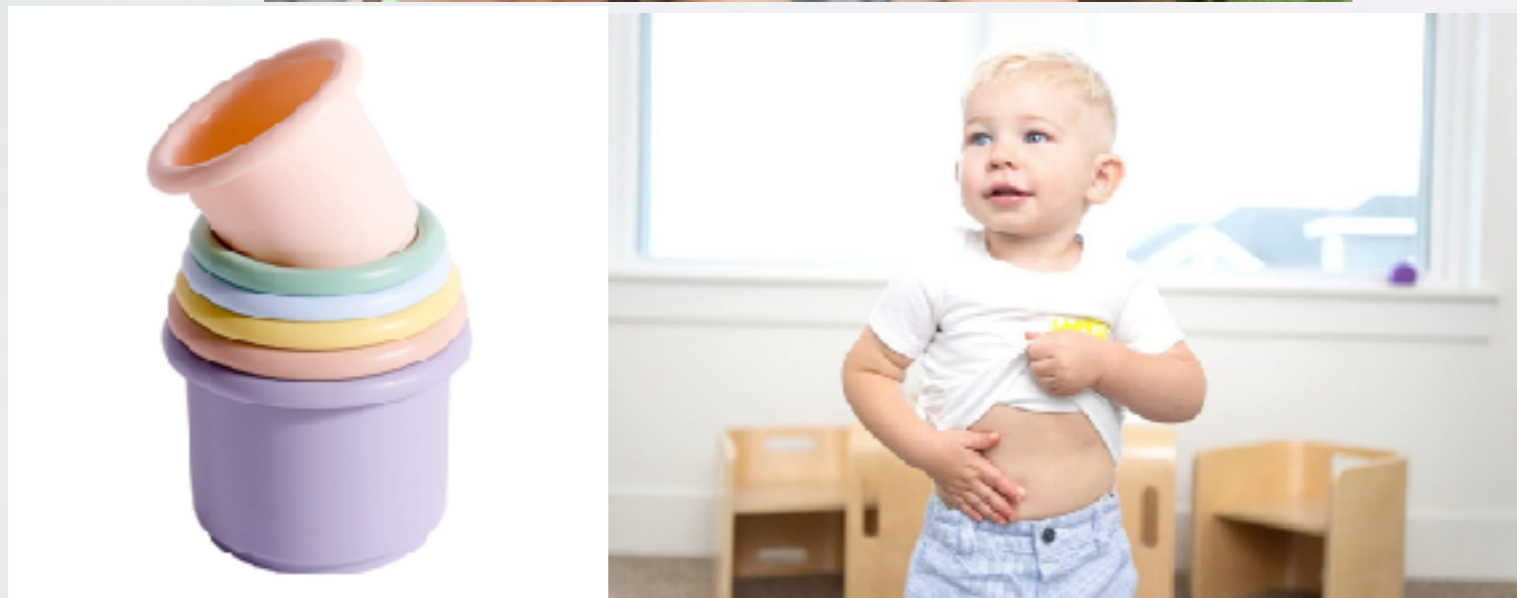
Stacks 2-3 blocks

Places shapes into
formboard puzzles

Brings spoon to mouth

Inverts small container
(pouring)

15-18 MONTHS



SENSORY

Imitates gestures

Imitates or echoes words

Nesting objects

Identifies a body part

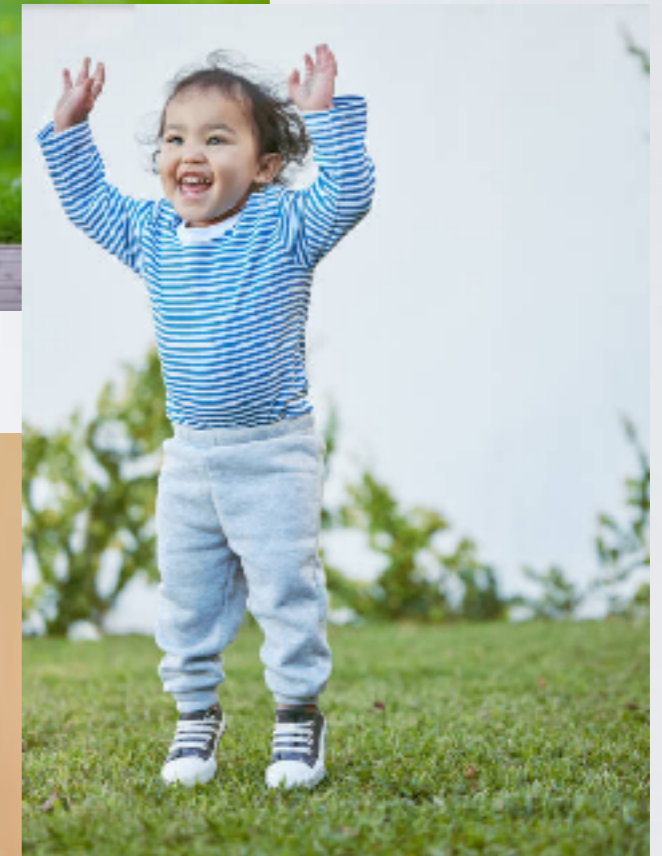
19-24 MONTHS

GROSS MOTOR

Runs



Walks sideways



Jumps up, forward,
down



Walks up stairs without
support

19-24 MONTHS

FINE MOTOR

Draws a vertical line,
circle

Opens doors by
turning knobs

Strings a large bead

Unzips and zips



19-24 MONTHS

SENSORY

Bowel and bladder awareness

Shows wide variety of emotions

Engages in parallel play

Imitates real-life activities through play



LET'S PLAY!



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!



GEAR?



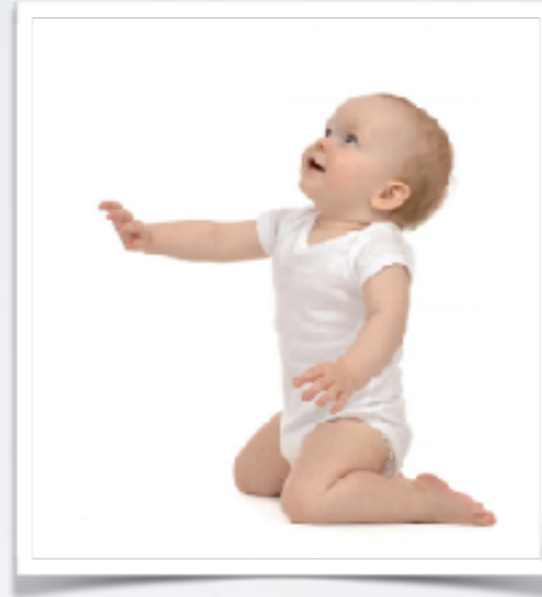
STANDING

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



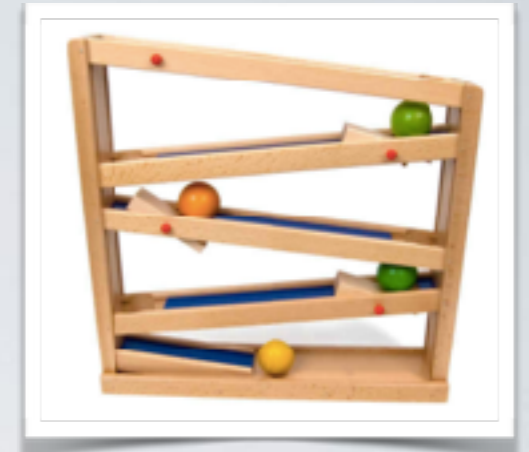
WALKING

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 (or even a heavy box!) 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 to maximize sensory input to the feet



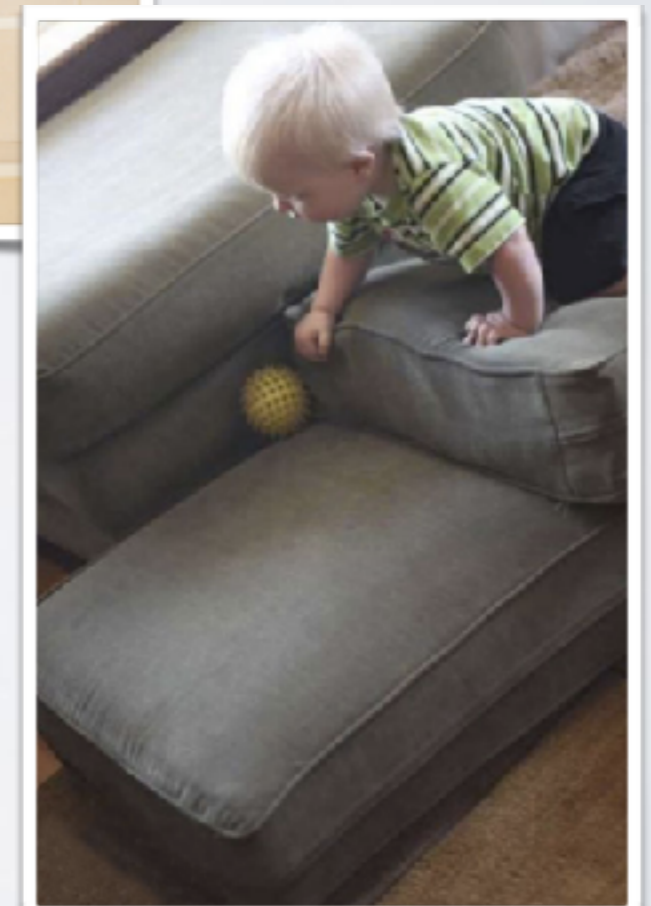
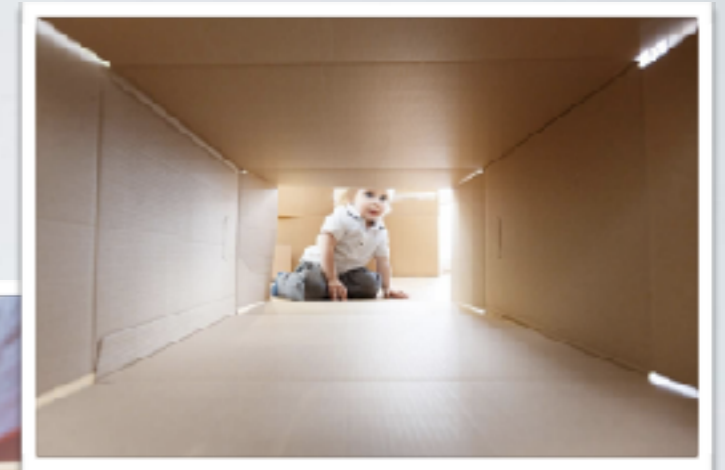
CLIMBING

MINI MILESTONES

- Crawling
- Squat to stand

TIPS AND TRICKS

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



FIRST SHOES

INFANTS: barefoot or grip socks are best!



BEGINNERS

- Flexible sole, firm heel cup
- Wide toe box
- Lightweight



INDEPENDENT WALKERS

- Thicker sole to protect feet from uneven surfaces and to cushion for higher impact (running, jumping)



INTERO-WHAT?

- Interoception is the body's inner sense for what it needs
 - Hunger, thirst
 - Temperature
 - Energy levels
 - Need to use the bathroom
- Strongly tied to emotions
- Honor your little one's communication!
- Be curious, ask questions about how they feel and support their decisions (with safe boundaries)
- Interoceptive awareness is an important skill that can be learned, just like other sensory and motor skills
- Increased interoception can foster self confidence, self efficacy, and sensory and emotional regulation



SENSORY AND MOTOR RED FLAGS

- Consistent loss of skills that were firmly established
- 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 12-24 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 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/>



explore
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therapy



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