



BabyTalks: Math is Everywhere: Supporting Math Skills in Infants and Toddlers

Learning Objective #1: Identify ways infants' and toddlers' play and routines build informal foundations for math.

Infants and toddlers are building foundations for math and school readiness skills as they:

pick up or mouth objects



By exploring objects with their hands or mouth, infants learn about number and similarities and differences, which supports later matching skills.

participate in daily routines



Daily routines teach infants and toddlers about patterns and measurement (time).

play with shapes, puzzles, and blocks



Shapes, puzzles, and block play supports children's spatial awareness, sense of number, patterns, and shape recognition.

clean up their toys



Cleaning up toys requires sorting skills and supports spatial awareness.

Learning Objective #2: Describe how math is integral to learning in all domains of the ELOF.



Approaches to Learning

Children are learning about patterns when they perform the next step in a daily routine, like getting ready for school, without being directed.



Social and Emotional

Children who feel emotionally and physically safe have the confidence to explore and practice math skills, like trying different puzzle pieces.



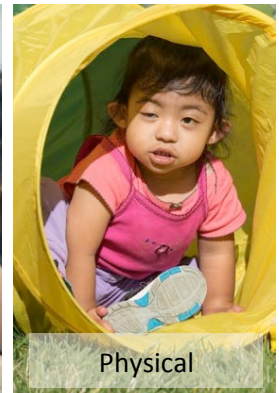
Language and Communication

When you add math language to children's everyday activities & routines, it helps build not only their math knowledge but their vocabulary too.



Cognitive

Block play supports math skills like shape & spatial awareness as children experiment with size & patterns. They problem solve when they design and build.



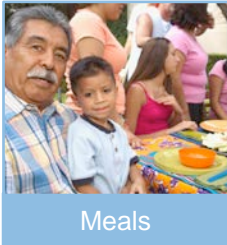
Physical

As children build gross and fine motor skills, they are also developing spatial awareness; such as, "I'm small enough to crawl through the hole in this tunnel."



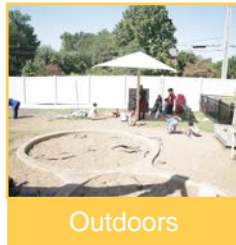
Learning Objective #3: Design activities and strategies for scaffolding and supporting early math skills in what children already do every day.

Adults help make infants' and toddlers' everyday play and routines mathematical through their language and support. Here are a few ideas to “bring out the math” in the classroom or at home:



Meals

During meals, talk about the pattern of each place setting or the shape or size of your child's food.



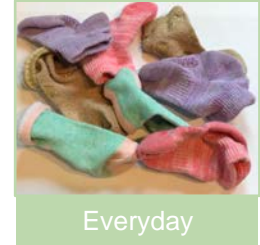
Outdoors

The outdoors are a great place to find shapes, look for patterns, and talk about spatial relationships.



Book Reading

Include math concepts like shape, size, or number when looking at any children's book.



Everyday

Turn laundry time into a matching game. Compare and contrast. Talk about size and patterns.

Resources and Support:

- Understanding STEAM and How Children Use It: <https://eclkc.ohs.acf.hhs.gov/publication/understanding-steam-how-children-use-it>
- Math Learning Trajectories: <https://eclkc.ohs.acf.hhs.gov/school-readiness/article/math-learning-trajectories>
- Learning and Teaching with Learning Trajectories [LT]: <https://www.learningtrajectories.org/>
 - Household Items to Support Math at Home: https://www.learningtrajectories.org/sites/default/files/inline-files/Household%20Items%20Handout_13.pdf
- STEAM 15-minute in-service suite: <https://eclkc.ohs.acf.hhs.gov/school-readiness/article/steam>
- High Five Mathematize: <https://eclkc.ohs.acf.hhs.gov/publication/high-five-mathematize>
- Finding the Math: <https://eclkc.ohs.acf.hhs.gov/school-readiness/article/finding-math>
- News You Can Use: Supporting Early Math Learning for Infants and Toddlers: <https://eclkc.ohs.acf.hhs.gov/school-readiness/article/news-you-can-use-supporting-early-math-learning-infants-toddlers>
- Effective Practice Guides: Emergent Mathematical Thinking: <https://eclkc.ohs.acf.hhs.gov/school-readiness/effective-practice-guides/emergent-mathematical-thinking>
- Early Learning and School Readiness: Cognition Development and General Knowledge Tip Sheet: <https://eclkc.ohs.acf.hhs.gov/sites/default/files/pdf/ts-cognition-development-eng.pdf>
- Research Notes: Little Scientists: <https://eclkc.ohs.acf.hhs.gov/sites/default/files/pdf/little-scientists.pdf>
- Head Start Early Learning Outcomes Framework (ELOF): <https://eclkc.ohs.acf.hhs.gov/hslc/hs/sr/approach/efof>
- ELOF2GO Mobile App: <https://eclkc.ohs.acf.hhs.gov/school-readiness/article/efof2go-mobile-app>
- ELOF Effective Practice Guides: <https://eclkc.ohs.acf.hhs.gov/school-readiness/effective-practice-guides/effective-practice-guides>
- Classroom Visuals & Supports: <https://eclkc.ohs.acf.hhs.gov/children-disabilities/article/classroom-visuals-supports>
- Planned Language Approach (many resources within PLA, but a few highlighted below): <https://eclkc.ohs.acf.hhs.gov/culture-language/article/planned-language-approach>
 - Tip Sheet - Creating Environments That Include Children's Home Languages and Cultures: <https://eclkc.ohs.acf.hhs.gov/sites/default/files/pdf/dll-creating-environments.pdf>
 - Tip Sheet - Including Children's Home Languages and Cultures: <https://eclkc.ohs.acf.hhs.gov/sites/default/files/pdf/dll-childrens-home-languages.pdf>