

REINFORCE MATH CONCEPTS BY INTEGRATING MATH THROUGHOUT THE DAY¹

This recommendation and the supporting strategies are excerpted from the What Works Clearinghouse practice guide for *Teaching Math to Young Children*. This resource is part of a series of instructional briefs designed to help families, afterschool providers, and other caregivers support their students' early mathematics instruction while learning at home or in a hybrid learning environment.²

By connecting math to a variety of everyday situations and routines, families and caregivers can make math meaningful and provide opportunities for children to practice what they have learned in a purposeful manner.

A math-rich environment can help generate excitement among children and encourage them to apply their math knowledge in real-life situations.

1 Embed math in everyday routines and activities.



Children need regular and repeated opportunities to reinforce math concepts.






- **Use** familiar routines to reinforce math concepts.

- For example, children can **use** tally marks, beads, or other markers to **count** how many days of school they have completed or how many days of sunshine they've had.



2 Highlight math within different subject areas throughout the day.



Reading	Science	Art	Health/Safety	Social Studies
When reading a story, ask questions that encourage children to solve a math problem based on the story.	Count how many days it takes for a plant to sprout.	Identify and count shapes in a piece of artwork.	Jump rope or play hopscotch with an alternating pattern .	Identify squares, straight lines, curved lines, and more on maps.
				

3

Create a math-rich environment where children can recognize and apply math.



- **Make** math-related objects and tools (for example, rulers and blocks) readily available.
- **Label** math-related objects and tools so that they are easy to find and use.
- **Organize** activities and routines with numeric systems.



4

Use games to teach and practice math concepts and skills.



Games provide an engaging opportunity to practice and extend skills. If children have fun playing the games, they are more likely to be motivated to practice math.

- **Use** games that are included in math workbooks, purchase games, create games, or use games that come up during natural play—like hopscotch or jump rope—to reinforce math concepts.

<u>Basic Hiding</u>	<u>Hidden Stars</u>	<u>Concentration: Numerals & Dots</u>	<u>Shapes</u>	<u>Favorites</u>	<u>Animal Spots</u>
recognizing small numbers	one-to-one counting	matching numerals with quantities	features of shapes	sorting and grouping	one-to-one correspondence

1 See https://ies.ed.gov/ncee/wwc/Docs/PracticeGuide/early_math_pg_111313.pdf#page=53. The recommendation reflects a systematic review of the available literature along with the expertise of a panel of specialists. The supporting research provides a *minimal* level of evidence for the recommendation.

2 Some examples reflect modified versions of the examples included in <https://ies.ed.gov/ncee/edlabs/regions/central/resources/teachingearlymath/3-support.asp>.