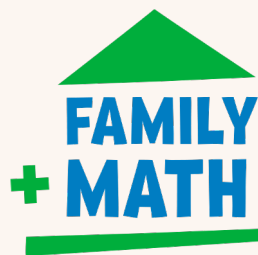


Welcome to Family Math!



Family Math was created and is distributed by PBS SoCal.
For additional information, please contact familymath@pbsocal.org.



We're so glad you're here!

Thank you for your partnership in bringing Family Math to your community and families. We created this guide to give you a brief overview of the program and inspire you to engage in this important work.

Why is early math so important?

Early math development is essential for school readiness and success. Young children (ages 2–5) exposed to the following early math skills have the foundation to learn school math successfully:

- Number sense and counting
- Patterns
- Shapes
- Sorting and collecting
- Spatial sense
- Measurement

Equally as important, having opportunities to develop foundational math skills can have a positive impact on math beliefs and attitudes.

According to many studies from over the past 12 years, mathematics achievement at school entry was the strongest predictor of later success in mathematics and, in some cases, reading, even when all other characteristics tested were controlled (Duncan et al., 2007; Claessens, Duncan, & Engel, 2009; Claessens & Engel, 2013; Foster, 2010; Watts et al., 2014). And, children from marginalized communities tend to underperform on kindergarten readiness tests—not because of inability, but because of unequal access to opportunity.

That means early math skills predict later academic performance, including in:

- Mathematics
- Reading abilities
- Socioemotional development

What is Family Math?

Family Math is a research-based, multiplatform, bilingual program, in English and Spanish, that focuses on building math positivity, confidence and knowledge of foundational math skills for families with children ages 2–5. Family Math equips parents and caregivers with strategies and resources to facilitate meaningful math experiences at home through playful learning and hands-on activities.

Family Math enables stations and community-based organizations to partner with parents and caregivers to support children’s early math development through play. We emphasize how learning and teaching math can be simple, fun and embedded in everyday contexts. Some families are unsure of where to start, and we aim to help families realize that many of the daily routines and activities they are already doing are the perfect place to introduce early math concepts. We work to build a math community, expand ideas of math and develop informal ways to engage in positive math activities with children.



What are the components of Family Math?

To meet the needs of all families, we provide different experiences and ways to engage in Family Math:

- Workshop guides and slides
- Printable materials
- Digital activities
- Instructional videos
- Music videos
- Digital games
- App experience (coming 2026)



I learned that mathematics can easily be kept in mind in daily life as when eating a cookie, when preparing a sandwich, or by looking at the shapes of our entire home, and I had not thought of putting mathematics into practice that way.

—Parent participant

How do we know Family Math works?

Since the initiative's launch in 2019, Family Math has reached over **60,000 parents, caregivers, children, and educators** through workshops and events. Data collected over the course of four years shows Family Math successfully:

- grew caregivers' knowledge of foundational math skills by **13%**
- increased caregivers' confidence by **14%**
- increased caregivers' math positivity by **11%**

As a result of engaging in Family Math experiences, **families are having more conversations that include math** during everyday activities such as cooking, baking or laundry. Families are also **more likely to create opportunities for their children to learn math at home.**

"For me, the past couple of weeks has made me more intentional in terms of math, especially incorporating it in our daily activities at home. For instance, whenever we make some eggs, I make sure that he counts the eggs and I make sure that the younger one is right next to him to watch. It has made me more intentional." -Family Math Parent

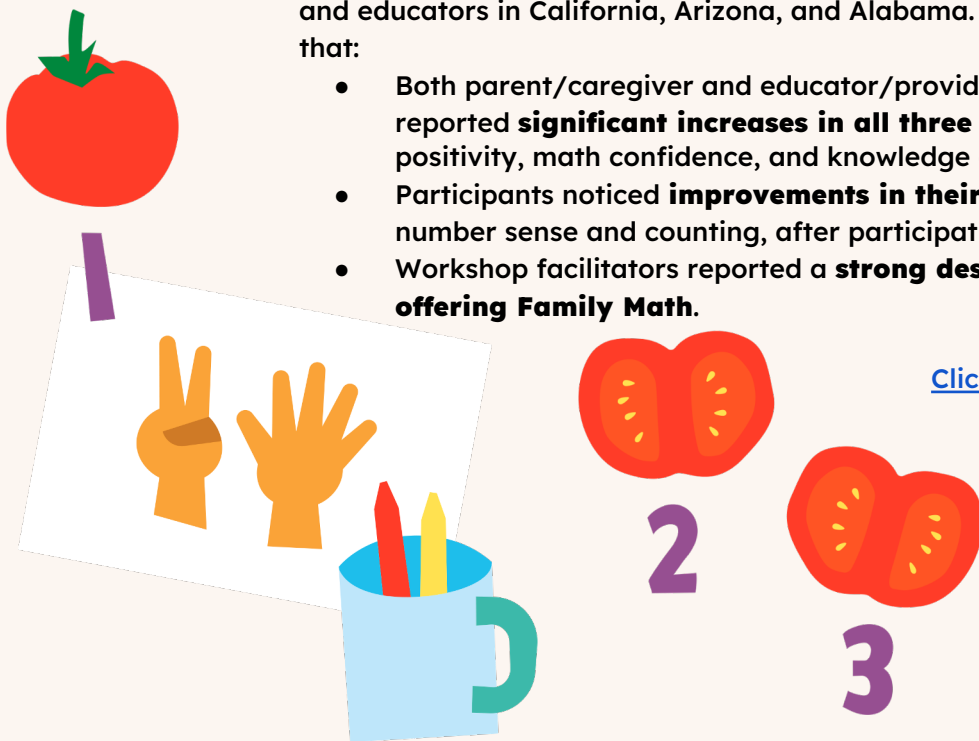
"The beauty of it all is that we are enjoying math, even when it doesn't feel like we are learning. It just feels like our regular lives, like our daily lives, our daily activities. We're just doing it. A lot of times I'm doing it without them even knowing. Math is a part of us now. It is something we do every day." - Family Math Parent

In 2022, we partnered with the Stanford Center on Early Childhood to conduct an impact evaluation of Family Math. The Theory of Impact model on the next page reflects the culmination of those evaluation efforts.

We later expanded our evaluation work with Stanford in 2024 to launch a national evaluation of Family Math that captured the impact of the initiative on children, families, and educators in California, Arizona, and Alabama. The results of that study demonstrated that:

- Both parent/caregiver and educator/provider participants across all three sites reported **significant increases in all three core metrics of Family Math**: math positivity, math confidence, and knowledge of children's foundational math skills.
- Participants noticed **improvements in their children's math skills**, especially in number sense and counting, after participating in a workshop series.
- Workshop facilitators reported a **strong desire for their stations to continue offering Family Math.**

[Click here to read the full report](#)



Thank you to our generous supporters.



FAMILY MATH THEORY OF IMPACT

VALUES

Family Empowerment

Co-Creation With Families

Playful Learning

Celebrating Family Strengths

Transformative Thinking Around Math

Strong Community Partnerships

STRATEGIES

LISTEN

- Engage in co-design and listening with families (surveys, needs assessment, etc.).
 - Create a safe space for parents and caregivers to share about math insecurities.
- Highlight parents' strengths and what they're already doing to support child's math learning.

EMPOWER

- Model how parents can encourage curiosity, problem-solving and "math talk" during everyday activities.
- Give families equitable access to resources and engagement opportunities.
- Provide leadership opportunities and trajectories to parents.

ENGAGE

- Provide families with multiple modes of shareable engagement (in-person and virtual workshops; free digital and printable resources).
- Partner with community-based organizations.
- Provide free, fun, enticing, "star power" experiences for families.

TARGETS

MATH ATTITUDES

- Increase parent and child math positivity and confidence.
- Increase parent motivation to engage in child's learning.
- Support parent growth mindset throughout life.

MATH KNOWLEDGE

- Enhance community partners' knowledge of importance of early math.
- Increase parent knowledge of early foundational math skills.
- Strengthen connections to increase parent recognition that math is everywhere.

MATH BEHAVIORS

- Encourage more math talk between parent and child.
- Boost parental creativity and innovation around math activities.

REPRESENTATION

- Enrich parent feelings of ownership over the program.
 - Foster parent comfort engaging in workshops.
- Strengthen families' feeling of being represented in program elements.

SUSTAINABILITY

- Increase family participation/retention in program.
- Build up family excitement and motivation to share about the program.
 - Advance leadership through parent facilitator program.

OUTCOMES

IMPROVE CHILDREN'S EARLY MATH SKILLS

- Improve Children's Math Skills
- Enhance kindergarten readiness and success in school.

NURTURE A FAMILY MATH CULTURE AT HOME

- Support parents' confident modeling and innovating of math learning opportunities and activities.
- Develop parent and child's identity as mathematical thinkers and doers.
 - Understand parents' unique journey in their transformation of thinking about math.

BUILD A SUSTAINABLE FAMILY MATH COMMUNITY

- Develop commitment from community partners to host.
- Connect partners in early learning space.
- Foster parent leadership to become facilitators.
- Build awareness of program and content in extended family and community.