EARLY

MATH FESTIVAL

HOST AN EARLY MATH FESTIVAL

A thoughtfully designed math festival shows that math is fun, engaging, and enjoyable plus it provides opportunities to partner with parents, guardians, and the community in creating enthusiasm for mathematics. It's also a great opportunity to share with parents and administrators what their children are learning about math.

Increasing awareness of the importance of early math, encouraging children's appreciation of math, and fostering mathematical learning and exploration – these are all benefits of hosting an Early Math Festival.

The Early Math Project believes there are compelling reasons to host early math festivals. Babies, toddlers, preschoolers, and elementary students who are encouraged to engage in frequent mathematical experiences and explorations develop confidence in their ability to understand and use mathematics. They learn at an early age that everybody has the innate ability to excel in math. Children who are encouraged to explore mathematical ideas and concepts become more persistent learners who seek out new challenges. A solid early math foundation helps children develop critical attributes such as imagination, flexibility, curiosity, inventiveness, and persistence.

Developmentally appropriate play and engaging mathematical experiences coupled with productive struggle and persistence contribute to success in life.

CELEBRATE

MATH

INTELLIGENCE IS NOT A FIXED TRAIT.

WE CAN ALL DEVELOP OUR MATHEMATICAL ABILITIES.

Early Math Festival Ideas and Suggestions:

Design an early math festival with opportunities to engage in rich tasks. Have children:

measure

sort

cut out shapes

pour

build

compare

count

organize

invent

create and play with patterns

calculate

cooperatively problem solve

share mathematical discoveries

Provide activities that highlight that there is often more than one strategy or approach to problem solving, exploring, and inventing. Include intriguing, age-appropriate puzzles and thinking challenges.

Encourage parents and guardians to talk with their children about what they are doing and ask them to explain their thinking and approaches. Provide opportunities for parents and children to interact with math materials and concepts together.

During the math festival and at home, encourage families to give their children time to solve meaningful challenges and problems on their own. Perhaps prompt with a leading question if a child becomes frustrated, but don't jump in and take over.

Spread the message that great mathematical thinking takes time. Complex problems frequently involve multiple attempts and mistakes along the way. Encourage children with supportive communication when something doesn't work out. Messages like "That approach didn't work the way you thought it would. What did you learn from it? What else will you try?" encourage persistence. Mistakes are a critical part of learning and a foundational part of understanding, not something to be feared.

Encourage families to include mathematical thinking, conversations, ideas, games, and activities as part of their daily routines. Provide examples of how this might be done, for example, count stairs as you climb them or count and measure ingredients while cooking. Discuss the properties of everyday objects, for example, ask why a leaf falls slowly to the ground while an acorn falls quickly. Encourage families to provide their children with opportunities to explore increasingly complex, but age-appropriate, ideas and projects.

Share with families that great mathematical ideas and solutions frequently require testing, trials, errors, risks, new approaches, etc. Persistence builds a capable, strong, and confident math mind!

Math festival ideas and the Early Math Project's math festival activities can be found at www.earlymathca.org.

When planning a math festival, consider the following:

- **Accessibility of activities –** Arrange activities so they will span a wide range of abilities, interests, and ages. Have activities that will engage older and younger siblings who may attend.
- **Timing –** Consider the best time(s) to host the festival so families are able to attend. Have fall, winter, spring, and summer festivals. Have a math festival as your "Get Acquainted" family event before the start of the school year. Consider if a math festival could be a part of Back to School Night or Open House.
- **Student Help -** Former students or middle and high school students may be interested in staffing an activity.
- **Parent/Service Organization/ Community Help –** Volunteers can help select activities and prepare materials for the festival.
- **Shared Sponsorship -** Consider hosting the event in conjunction with parent groups, service organizations, or a parent-teacher organization.
- **Safety -** Be mindful of small objects that may be choking hazards for children under 3 years of age.

Encourage families to routinely ask questions like:

How do you …?

How do you know that your approach will work?

Will that always work?

Can you tell me how you did that?

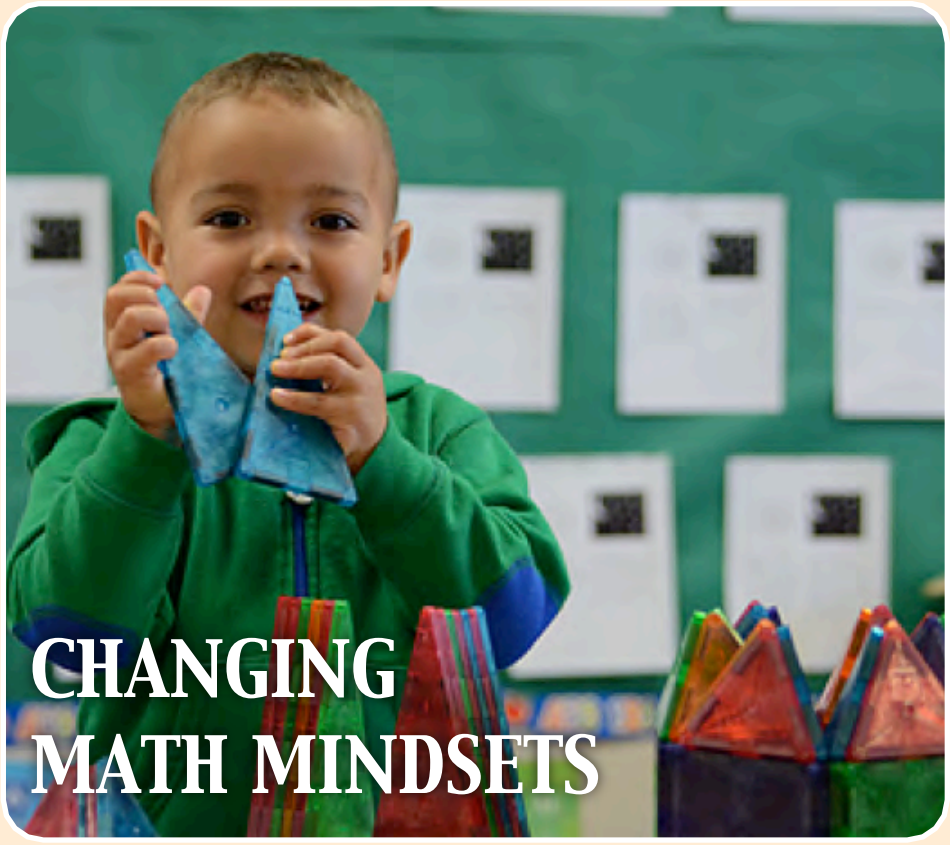
Is there another way to do that?

What was your strategy?

How would it change if you …?

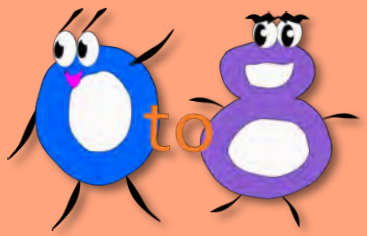
The Early Math Project would like to hear about your math festival. What worked well? Suggestions? Favorite activities? Etc. Please share your ideas and successes. We will continue to build an Early Math Festival Archive and would love to share some of your successes. Contact us at earlymathca@gmail.com

Follow the Early Math Project on Twitter: @EarlyMathCA



IT'S ...

FESTIVAL TIME



Find math festival ideas at Earlymathca.org