MATH FESTIVAL:
Virtual and Hybrid Addendum

Early math can happen anywhere!

VIRTUAL AND HYBRID MATH EVENTS ARE AN OPPORTUNITY TO PARTNER WITH FAMILIES AND BUILD COMMUNITIES OF LEARNERS

Whether virtual (happening remotely with the use of technology) or hybrid (a combination of in-person and virtual participants), successful early math and STEAM (science, technology, engineering, arts, and math) events often have certain features in common.

- They are planned with a deep understanding and connection to the families involved. They are sensitive to family needs, interests, and backgrounds, and are scheduled at times and locations that support family involvement. Ideally they are planned **with** families.

- They provide ideas and strategies for encouraging continued exploration at home and use commonly available items so everyone can participate.

- They seek family feedback and take into consideration what is working well and what would work better. They take into consideration family feedback when planning subsequent events.

- They are ongoing in nature, build upon each other, and encourage families to incorporate STEAM into everyday activities and routines.

- They carefully consider the role of staff in regard to family interactions.

Find collections of activities suitable for family STEAM events at https://www.earlymathca.org/family-steam-events

Early Math Project

VIRTUAL AND HYBRID FAMILY ENGAGEMENT SUGGESTIONS:

Before you begin, ask families what they need to participate successfully in a virtual or hybrid family engagement event.

Provide choice by setting up different activities in breakout rooms. If holding a hybrid event, make breakout rooms mirror as closely as possible the activities that take place at the in-person portion of the event.

Send home uncommon materials and materials that don't have a virtual equivalent.

Find ways to support children who want to participate, but don't have a family member attending with them. Can they join another family group or participate with a staff member?

Use virtual galleries as a way for everyone to share what they did. Use virtual galleries to post pictures, share descriptions of what was done, and encourage families to share with each other.

Sometimes less is more. Consider meeting monthly for a single activity event. Invite a family to help co-host the event. Do a monthly STEAM activity that's based on favorite children's literature. Start your event by reading the book and following up with a related activity.

Involve families in the planning. Find out when they can participate, what types of activities they'd like to explore, and if they need materials provided. Always ask for family feedback. Find out what worked well and where there is room for improvement. Use this feedback to shape future family events.

VIRTUAL CONSIDERATIONS:

Ensure all families have the materials and technology to participate. Adjust and modify so everyone is able to participate. Survey in advance and send home supplies or a supply list so everyone can join in.
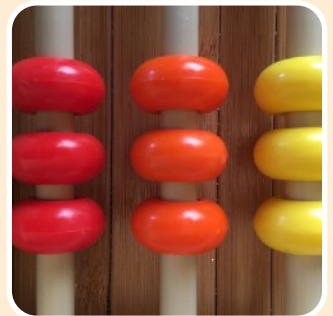
Provide alternative ways to participate. For example, a building activity might just as easily be done with recycled boxes or cans as with a set of blocks. Suggest several ways for families to participate using commonly available materials.

Set the length of your event according to the needs of your participants.

Find ways to build community - through chat, virtual picture galleries, or pairing families to share their experiences at the end of the event. Look for ways to introduce families who don't know each other already. Look for creative ways to pair families.

Make use of online math tools like virtual dice and random number generators. Do your participants need graph paper or a set of tangrams? Provide links to online copies of math materials on the internet. Be ready to provide printed materials in advance, as needed. If using specialized materials, send home in advance and develop a check out and return system.

Practice using remote meeting technology before your event. Test it out before you begin. Be ready to help families with new technology. too. Designate staff to help with technical difficulties that may arise.

HYBRID CONSIDERATIONS:

Plan carefully so the virtual and in-person participants have an equivalent experience.

Establish the virtual participants as part of the group from the beginning. Designate one of the virtual participants to kick off an activity, welcome the other families, or share what they are looking forward to doing.

Consider using technology to allow virtual and in-person participants to interact with each other.

Designate staff who will interact exclusively with virtual participants by answering their questions and checking in frequently to see how things are going.

Designate a staff person to share comments that are made by the virtual participants.

Remind anybody who speaks at the event to also address the virtual audience.

Build community by having everyone (virtual and in-person) contribute to a virtual picture gallery. Encourage families to post pictures and share discoveries. Encourage families to comment on the pictures and posts of others

Ensure everyone knows how to use a virtual gallery to post pictures and interact with each other.

Live stream the event so people participating remotely can see what is happening.

RESOURCES FOR VIRTUAL AND HYBRID EVENTS:

- **ZOOM and ZOOM Breakout Room Information –** Videos and information for using zoom to host a virtual event: https://www.youtube.com/watch?v=HbYHaNvCw9M

- **Virtual Math Tools and Templates –** Visit the Early Math Project Website for a collection of online tools and templates: https://www.earlymathca.org/printables

- **Toddler and Preschool Collections of STEAM ACTIVITIES -** Activities for math and movement, math and art, making and tinkering, beginning board games, and patterning and sorting: https://www.earlymathca.org/family-steam-events-3-to5

- **TK/Kindergarten through Grade 3 Collections of STEAM Activities -** Activities to support child and family exploration: https://www.earlymathca.org/family-steam-events-k-to-3rd

- **Free Virtual Galleries:** padlet.com, flipgrid.com, web.Seesaw.me
  Other Home Communication Platforms: Explain Everything, Learning Genie, Class Dojo; Remind, Ready Rosie

- **Family Engagement Guidance Document:**
  - o   English: https://bit.ly/3iKC97z; Spanish: https://bit.ly/3qgac9z