



DIY MATH FESTIVAL PLANNER

HOW TO RUN A MATH FESTIVAL IN YOUR COMMUNITY



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WHAT IS A MATH FESTIVAL

A ONE-TIME EVENT WHERE CHILDREN GATHER AND EXPLORE MATH THROUGH PUZZLES AND GAMES.

Our festivals are hosted by volunteers affiliated with schools, community groups, colleges and universities, service clubs...really, anyone who wants to connect the children in their community with a joyful math experience.

While hosting a festival might seem like a daunting task, it is eminently doable and we're here to support you. We offer help with marketing and registration, choosing activities and volunteers, and by supplying you with printable activity guides, festival decorations, and more.

Build Confidence

Promote Inclusion

Inspire Joy

Value Play



Create Community

MATH FESTIVALS



WHERE?

In person or on our virtual festival platform.

HOW MUCH?

Festivals range from \$0-500. It just depends on what activities you choose.

PREP TIME?

We recommend at least 2 hours to prep for a festival. Bigger events can take up to 20 hours.

WHY HOST A MATH FESTIVAL

PROVIDE CHILDREN WITH CONFIDENCE AND JOY IN MATH.

Festivals provide magical math moments that stay with children long after they leave. Children experience a play-based approach to problem solving and critical thinking and build confidence through challenges that they conquer while surrounded by a supportive community.

"There were kids who love math from all over the metropolitan area, and a lot more kids who hate math but who had been coerced by their parents into coming.

The most amazing thing was that they ALL loved it, and ALL had a blast, and you couldn't tell who was who."

Sikimeti Ma'u,
Teacher

MATH FESTIVALS PROMOTE:



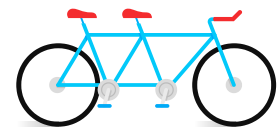
AGENCY

A math festival is a celebration of student independence. We provide a variety of activities and the freedom to choose.



ENGAGEMENT

We encourage students to "get their hands dirty" with a variety of activities. Tools include simple counters or large-scale floor mats that let students walk and jump through puzzles.



COLLABORATION

Children learn math with their parents and kids of other ages. Regardless of age, ethnicity or background, everyone is there to celebrate math.

FESTIVAL MODELS

Not ready for a mega festival with 200 children? We get it! Check out our festival models below to find one that fits your budget and time.



Festival Checklist & Timeline

Download the checklist after you've chosen a model.

[» Download](#)

ONLINE FESTIVAL

20-100 children

Activities

3-4 plus a maze activity

Volunteers

Host plus 5-15
(1-3 per activity)

Prep Time

2-3 hours
Choose an activity package; find and prep activity leaders

Cost

\$0

MINI FESTIVAL

25 children
(e.g. single classroom)

Activities

1-4
Small groups all work on the same problem, or different problems at math stations

Volunteers

One

Prep Time

1/2 to 1 hour
Choose an activity package; gather manipulatives; set up & clean up room.

Cost

\$0

CLASSIC FESTIVAL

up to 100 children
(e.g. across grades or divisions)

Activities

4-8 plus a maze & coloring activity
Repeat each activity at several tables

Volunteers

Host plus 6-15
(one for every 6-8 children)

Prep Time

5 - 10 hours
Choose an activity package; gather manipulatives; set up & clean up venue; find & prep Activity Leaders; print off activity instructions & table names.
Optional: name tags, snacks, festival favors; marketing.

Cost

Basic: \$50
printing; manipulatives; maze mats

Deluxe: \$100 to \$500

printing; manipulatives & maze mats; snacks; festival favors

MEGA FESTIVAL

100+ children
(e.g. entire school or district)

Activities

5-10 plus a maze & coloring activity
Repeat each activity at several tables

Volunteers

Host plus 15+
(one for every 6-8 children)

Prep Time

10 - 20 hours
Choose an activity package; gather manipulatives; set up & clean up venue; find & prep Activity Leaders; print off activity instructions & table names; print name tags; marketing.
Optional: snacks; festival favors

Cost

Basic: \$50
printing; manipulatives; maze mats

Deluxe: \$200 to \$500

printing; manipulatives & maze mats; snacks; festival favors

WHAT YOU NEED FOR A FESTIVAL

1. Venue
2. Volunteers
3. Activities
4. Marketing



HOW JRMF HELPS YOU



Festival Planning

We rely on you, our volunteers, to host festivals in your communities. We give you all the resources you need to make the event a success.



Volunteer Education

We train teachers, parents and community leaders on how to lead engaging and fun math activities.



Activities

We create low-floor, high-ceiling games and activities that are research-based and require students to problem solve and collaborate.

#1 VENUE

in-person festivals

The optimal math festival location is an indoor or outdoor space large enough to accommodate tables for activity stations separated by wide walking paths between them.

Provide some chairs, but do leave room at each table for those children who prefer to stand while they work.

Typically, there is a welcome or registration table near the entrance, and every activity should have its own table. For larger festivals, you will want to repeat the same activity at several tables spread throughout the space.

Depending on the number of attendees, indoor festivals are optimally held in spaces such as auditoriums, multipurpose rooms, or classrooms.

Outdoor spaces tend to be near schools or community centers that provide access to basic amenities.



Tips for an In-Person Festival:

We recommend one activity table for every eight children.

2-3 hours is the optimal time for an in-person festival.

Set aside free space in the room for walking puzzles. This creates a nice blend of movement and stationary activities.

Avoid putting activity names and instructions flat on the table. Create name tents or attach to the sides of tables.

Have a recycling bin if you're having crafting activities!

Consider a snack table. It could be as simple as water and packaged items or fruit.

Use dry erase markers with plastic sleeves to save on printing, and use cloth as erasers. And avoid green markers if you can - they are hard to wipe off!

Name tags can increase children's sense of belonging and engagement. We recommend first names, age and/or grade level. Also consider giving stickers for every activity the kids complete.

Include a pencil sharpener if you're using any paper and pencil activities.

online festivals

Although we love doing in-person festivals, we have also developed models for hosting festivals online over Zoom or Google Meet. This has been an attractive option for many communities, as it's an easy way to connect students with volunteers who cannot be physically present.

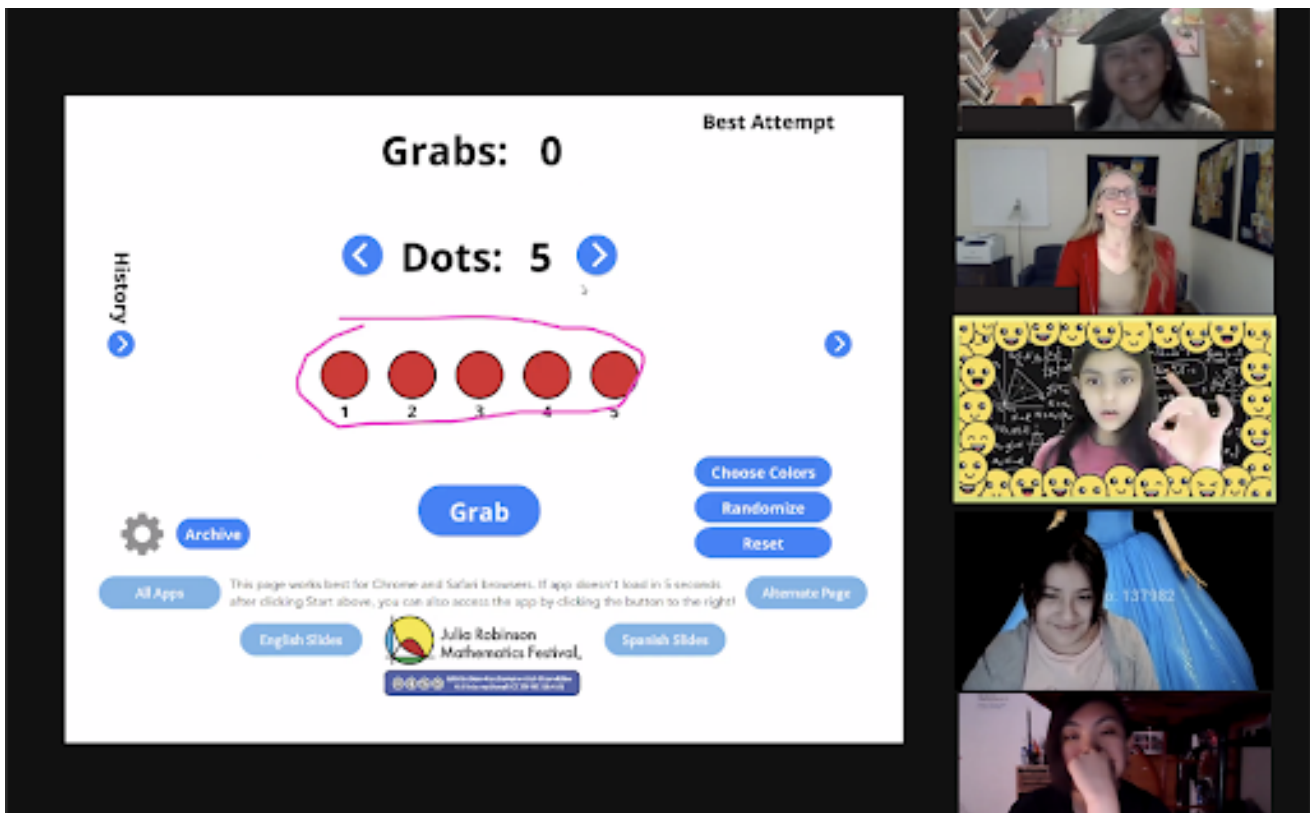
Using a combination of volunteer-led breakout rooms and [Desmos](#) to collate thinking, students are encouraged to collaborate and be the leaders of their own mathematical explorations.

We recommend having students explore one activity during a 1 to 1.5 hour online session. Contact us at info@jrmf.org for more information.

Are you a K-12 teacher?

Invite us in for a free online classroom visit.

We'll virtually explore one of our favorite problems with your students using Zoom or Google Meet. Contact info@jrmf.org for more information.



The image shows a screenshot of a Desmos activity interface on the left and a Zoom meeting grid on the right. The Desmos interface displays a game titled "Grabs: 0" with "Dots: 5" and a "Best Attempt" label. It features five red dots numbered 1 to 5, a "Grab" button, and options like "Choose Colors", "Randomize", and "Reset". The Zoom grid shows five participants: a woman in a graduation cap, a woman in a red jacket, a woman with a yellow emoji border, a woman in a blue dress, and a woman in a dark top.

#2 VOLUNTEERS

WHAT IS AN ACTIVITY LEADER?

Activity leaders are a vital component of a math festival. These are the people who engage the children in the activities and guide their math exploration. A math background is great, but should not be a deciding factor in choosing activity leaders.

Rather, you want to ensure the people who volunteer enjoy working with children, are patient, and good at listening.

HOW DO I FIND ACTIVITY LEADERS?

Reach out to former teachers, professors, community members, and retired professionals. School PTAs are also an excellent starting point as are community-involved industries or groups such as Google or Rotary.

Many festival hosts have had success finding activity leaders by reaching out to college math majors, college preservice teachers, and high school students working on service projects. Their enthusiasm and empathy with the student experience is a bonus.



**The ideal ratio is
1 activity leader for
every 6 children,
and we recommend
no higher than
10 to 1.**

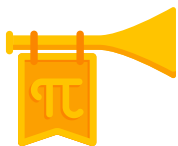
HOW DO I TRAIN THEM?

The most successful festivals provide education opportunities for activity leaders. We recommend setting up a one-hour meeting (online or in person) prior to the event to allow activity leaders to engage with the activities ahead of time. During this meeting, activity leaders should learn the activities they will be leading, think about how they will guide children through their activities, practice, and receive supporting materials that they can reference later.

For a fee, we are also available to lead your activity leader session for you. Contact info@jrmf.org for more information.



VOLUNTEER RESOURCES



Recruit Volunteers

Download our email templates to use when you're recruiting your activity leaders.

» Download



Train Volunteers

Download our one-hour agenda and slides to train your activity leaders before your math festival.

» Download



Volunteer Guides

Download our activity leader guidelines to train them on leading a math activity.

» Download

#3 ACTIVITIES

At a math festival, children play with math. They use manipulatives to visualize and solve problems without resorting to procedures.

Success isn't measured by the number of problems solved nor the speed, but rather by how long they stick with activities, and the breadth and depth of their explorations.

The key is the low-floor/high-ceiling design of our activities, which means that every child can get started by the simple act of trying something and seeing what happens, yet the activities lead to challenging mathematics.

We have a large number of these activities to choose from and, to help you out, we've preselected activities and organized them into kits. Each kit has six activities with a materials list and all the relevant documentation you will need to use for each.

Create a Maze Mat



Maze mats are one of the most popular activities at math festivals.

» Download

Make a Festival Favor

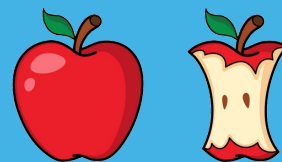


Send a bit of the festival experience home for children to share with family and friends.

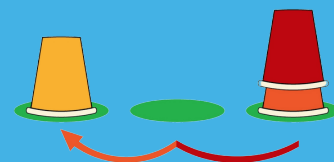
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Activity Kit One:

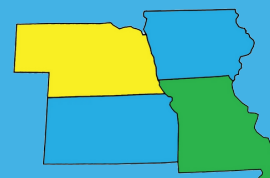
Apple Picking



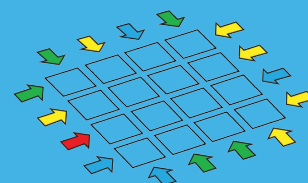
Cup Stacking



Map Coloring



Skyscrapers



Königsberg



Ladybugs



» Download

#4 MARKETING

We make marketing your math festival as easy as 1, 2, 3. We provide the registration links, web page, attendee check-in, and marketing materials you'll need to spread the word and excitement about your Julia Robinson Mathematics Festival.

REGISTER YOUR FESTIVAL

Once you have determined your venue, date and time, the next step is to register your festival with us. Visit bit.ly/host-jrmf and fill out the form.

We'll review your information and approve the details. Then you will receive an email including the event web page for you to share with your friends and neighbors. We will also create a host-only attendee check-in page for you to see who has signed up to attend your event.

» Register

SPREAD THE WORD

Now that your event is live, it's time to share your upcoming festival with everyone you hope will attend. We recommend a three-pronged approach to market your event:

Social Media

Social media is a great tool to share information about your events.

Graphics and sample content are available for you to use for each channel, including Facebook, Twitter and Instagram.

#MAGICMATHMOMENTS

We also encourage you to use our hashtag, [#magicmathmoments](https://twitter.com/magicmathmoments) and tag [@theJRMF](https://twitter.com/theJRMF) in all of your advertising.

JRMF will often share your content on its social media channels, AND you'll be entered to win a free JRMF t-shirt if you do!

Email

Send an email to your friends, family, neighbors and school directory informing them of the event.

Another option is asking your school or venue to send out the information on your behalf. Many have large email lists that can expand your reach.

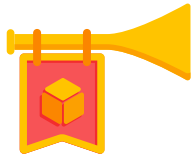
Email graphics and sample content are available for you to use.

Local Community

Do flyers catch your attention? How about rotating PowerPoint slides on your school's monitors? Are you on a listserv or a text chain with your community?

Think creatively about how best to reach children and parents in your specific neighborhood. We have template flyers and slides you can use to spread your message.

MARKETING RESOURCES



Festival Marketing

All the marketing resources you need for your event, in one place.

» [Download](#)



Event Registration

Register your event with us and we'll create an event web page and help sign up attendees.

» [Register](#)



JRMF Logos & Colors

Create your own graphics with our logos and colors.

» [Download](#)



Social Media Content

Download graphics and suggested posts for all your social media channels.

» [Download](#)



Flyer & Slide Templates

Mock up your own flyers and slides to share in your community.

» [Download](#)



Email Templates

Send emails out to your potential attendees with our suggested email copy.

» [Download](#)

WHAT TO DO AFTER THE FESTIVAL

GIVEAWAYS

Festival Favors

Consider sending children home with [festival favors](#). These are small plastic bags containing a few manipulatives and instructions for some of the activities at your festival or other activities you wish them to try at home. We have a small selection of child-friendly instruction booklets available on our website for you to choose from.

T-shirts and Swag

We have JRMF items available for purchase on [our website](#) that you may wish to hand out or use as registration/raffle prizes. Donors may also donate items as giveaways.



FEEDBACK FORMS

GUEST FEEDBACK



Guests can fill it out before they leave, or you can [email them the survey afterward](#).

» Download

HOST FEEDBACK



Help us improve our festivals. Provide feedback about your host experience.

» Download

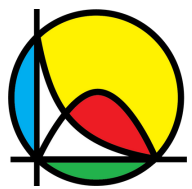
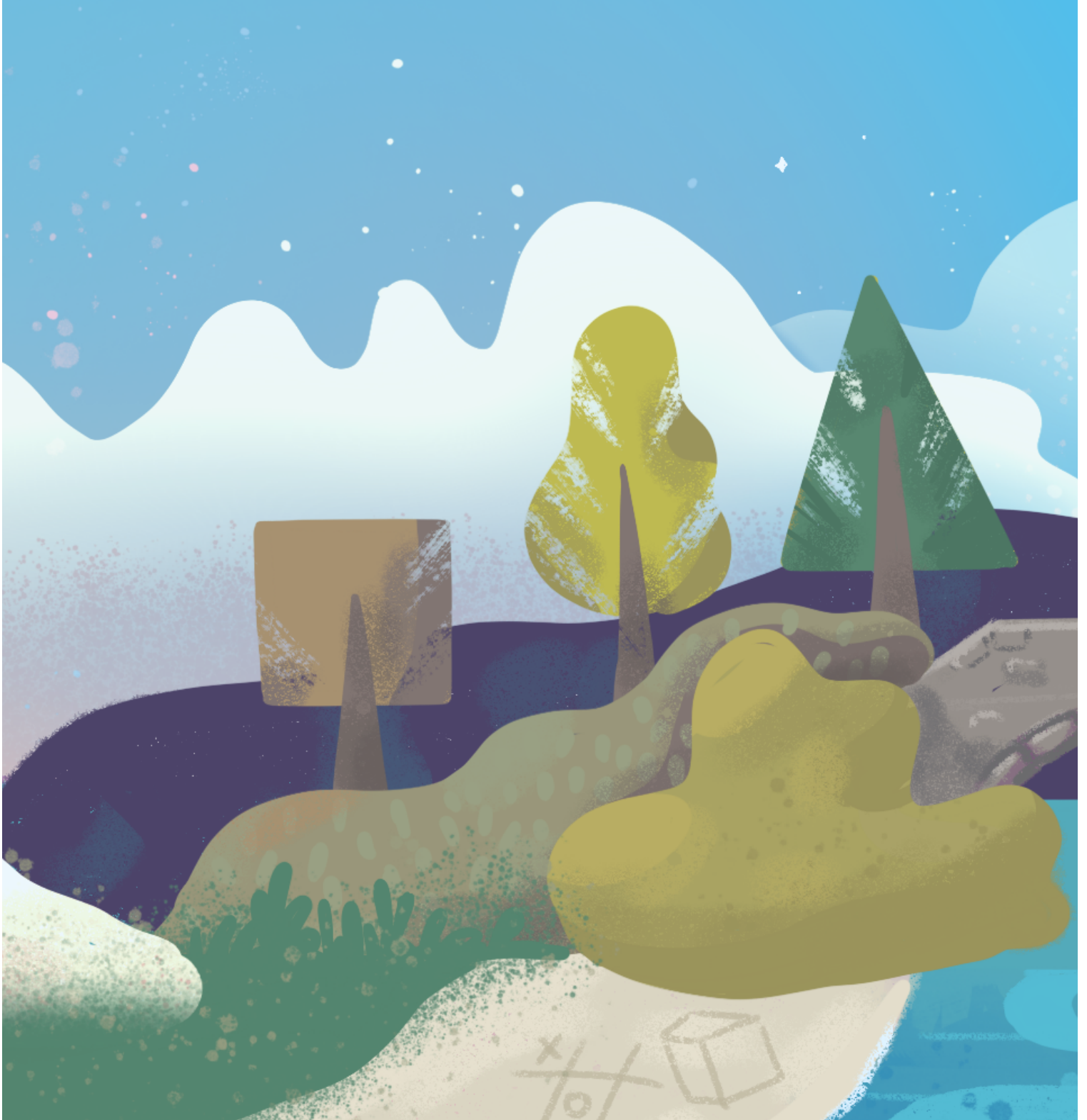


DIY MATH FESTIVAL PLANNER RESOURCES

All our links in one place for you!



CATEGORY	RESOURCES	
Overview	Festival Checklist & Timeline	
Contact Us	info@jrmf.org	
Videos	Festival Video (short)	Festival Video (long)
Volunteers	Volunteer Guide	Train Your Volunteers
	Volunteer Recruitment Emails	
Activities	Activity Kits	GatherTown Festivals
	Create a Maze Mat	Create Festival Favors
Marketing	Marketing Resources	Logos & Colors
	Email Templates	Social Media
	Flyer and Slide Templates	
Registration	Register Your Event with Us	
Feedback	Guest Feedback Form (Digital)	Guest Feedback Form (Print)
	Host Feedback Form	Submit Photos/Videos
Other	JRMF Merchandise	Name Tags



Julia Robinson
Mathematics Festival®

Inspiring joy with math

jrmf.org
info@jrmf.org

