Introduction

One hundred individual events will be happening across the country as part of the *Mission2Mars* project, so what will your events look like?

This guide is a starting point for informal science institutions and community-based organizations to begin to choose M2M resources, engage amateur astronomers, and build the events that work best and will have the greatest impact on YOUR communities.

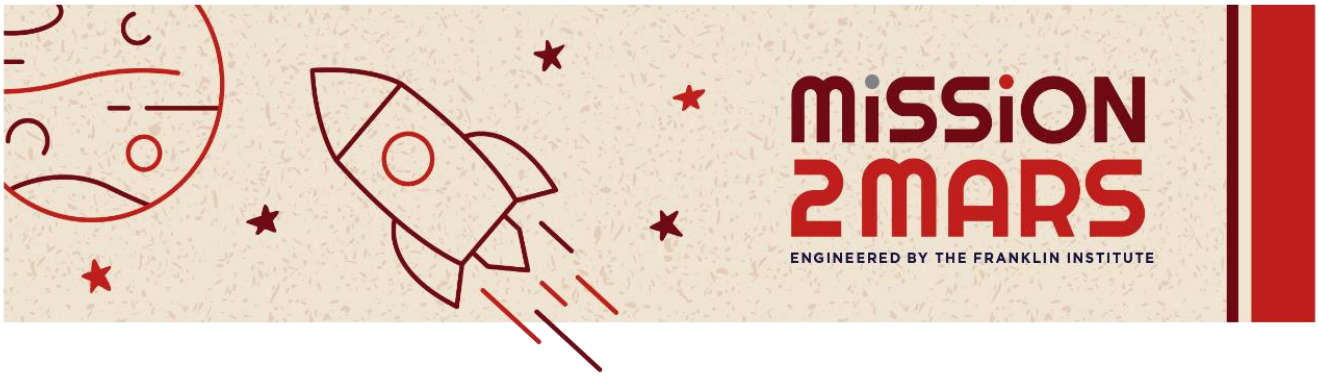
All M2M events:

- Create community-based engagement around NASA's Artemis lunar exploration program, reaching marginalized populations in STEM fields including people of color, low socioeconomic status populations, and low-resourced rural and urban communities
- Are at least 45 minutes long
- Use at least one of the resources and activities provided as part of the M2M content training

Beyond these guidelines, M2M events are flexible. An M2M event can:

- Be indoors or outdoors
- Involve sky watching
- Have an amateur astronomer present
- Be a standalone event or be incorporated in a large event

IN THIS GUIDE



Choosing Your Event Format

Generally, M2M events will fit into one of three categories:

- **Star Parties**

  This is an event that has evening sky viewing with your amateur astronomers so at least part of the event must happen outdoors. There are also supporting hands-on tabletop activities that participants choose to do and the event may also include food and other giveaways. Generally, Star Parties are standalone, drop-in family events.

- **Community Events**

  This is a family event that can be either indoors or outdoors and as such may or may not include sky watching. They can be daytime or evening events and typically include multiple tabletop activity stations. These types of events can be standalone or added to existing events like block parties, family nights, or community festivals.

- **Other Events**

  These events are typically self-contained, short-form use of the activities with groups of students or children with educators. These are not standalone events, but rather activities incorporated in existing programs like summer camps, afterschool programs, or school events.

Not sure where to begin? Follow these steps as you plan your event.

1. Start with the attached *Event Brainstorming Template* to help your team identify:
   - Audiences you're hoping to engage
   - Dates and timing
   - Possible locations for events
   - How you will let audiences know the event is happening
   - Which M2M activities will work best for your event
   - Other details that impact the type of events you will host

2. Match your event dates to what is happening in the night sky by checking out the attached *2022 Astro Dates.*

3. When you have settled on the type of events you will host, use the attached *Event Planner* to keep all of the details of your event in one place.

4. If your team is planning a Star Party event, the attached *How to Host a Star Party* will provide you with tips to help your event run smoothly.

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Event Brainstorming Template

Who will come to the event?

- Will the event be for families or students?
- How many people are you expecting?
- Will you require registration for the event? How?
- Will you open the event to people from outside of the CBO?

Who will staff the event?

- Will an amateur astronomer be part of the event?
- Who from the CBO will be leading activities?
- Will you need other staff or volunteers from the CBO?
- Who from the ISI will be attending the event?
- Who will help with set up and break down of the event?
- Who from the location needs to know the details of the event? (i.e operations or facility staff)
- Who will take photos and make sure photo releases are filled out?

Where will the event take place?

- What location(s) will you use for the event?
- Will the event be indoors or outdoors?
- Is there electricity at the location?
- Is there parking? How will attendees get to the event?
- Are there enough restrooms and will they be open at the event?

How will people find out about the event?

- How will members of the CBO be invited to the event?
- Will you use emails to invite attendees? Who will send them?
- Will you use flyers? How will flyers be distributed?
- Will there be social media posts before the event? Who will post them?
- Are there CBO or AA event calendars this should be added to?

When will the event take place?

- What is happening in the night sky when the event is scheduled?
- Will this be a daytime or evening event?
- Will this be a stand alone event or will it be part of another event?
- Does the event need a rain date?
- How does the event fit into the general CBO schedule of events?

What supplies and materials are needed at the event?

- Will you have food at the event? What about water?
- How many tables and chairs do you need?
- Will you need extension cords, computers, or monitors/TVs?
- Will you have a sign in sheet for attendees?
- Will you have any prizes or giveaways?

Which M2M activities will be part of the event?

- Which activities would be most interesting or exciting for your attendees? Which will get your attendees excited about the Artemis mission?
- How many activities will be part of the event?
- Which activities would work best for the location of the event? Do any need more space than you have?
- Which activities would work best for the timing (daytime/evening) of the event?
- Which activities support what is happening in the night sky during the event?

Event Notes

- How often will the team meet to plan the event?
- How does this event fit with the other M2M events planned?
- What does the timeline for preparing for this event look like? (i.e. when will advertising go out, when will supplies be delivered, etc.)

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Event Brainstorming Template

Who will come to the event?

Who will staff the event?

Where will the event take place?

How will people find out about the event?

When will the event take place?

What supplies and materials are needed at the event?

Which M2M activities will be part of the event?

Event Notes

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Event Planner

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Date/Time	Location

Set Up Notes

Activity/Station **Link to Activity**	☐ **Indoor** ☐ **Outdoor** ☐ **Electricity** ☐ **Astronomer** **Staff/Volunteers**	**Materials**	**Notes**
Activity/Station **Link to Activity**	☐ **Indoor** ☐ **Outdoor** ☐ **Electricity** ☐ **Astronomer** **Staff/Volunteers**	**Materials**	**Notes**
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Amateur Astronomer Contact	**ISI Contact**
CBO Contact	**CBO Contact**

How to Host a Star Party

It's easy to throw an observing party! Here's a checklist for how to plan the party and what you should do before the event, the materials you'll need, and tips for running a successful star party.

First, what IS a star party? Check out this video: Derrick Describes a Star Party before you plan your event.

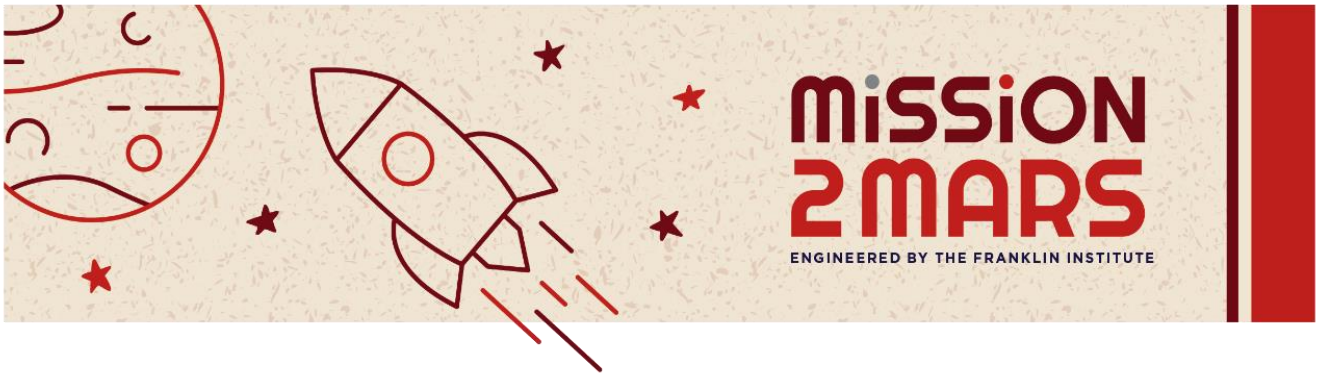
Planning Your Star Party:

- **Use the *M2M Brainstorming Template* to choose a date and location.**
  - Check the *M2M Astro Dates* for what you may see in the sky on the day of the event.
  - First quarter Moon is always a winner, and full Moon is worst!

- **Secure Amateur Astronomers with telescopes for the date and time of the event.**

- **Practice looking up and seeing things.**
  - Work with any materials (sky maps, etc.) you'll be using, so you're comfortable with them.

- **Gather materials for the event.**
  - Star maps for your audience.
    - A map of this month's sky
    - Astronomical League Monthly Star Map
    - This Week's Sky at a Glance
  - Red film to cover flashlights brought by participants.
  - Any handouts connected to observing activities, i.e. for making astronomical measurements using your hand for scale.
  - Moon map for lunar observing
  - You might also want to have:
    - Extra flashlights (with red film)
    - Tape or Rubber Bands to hold red film on participants' flashlights
    - Materials needed to do any other activities in your plan



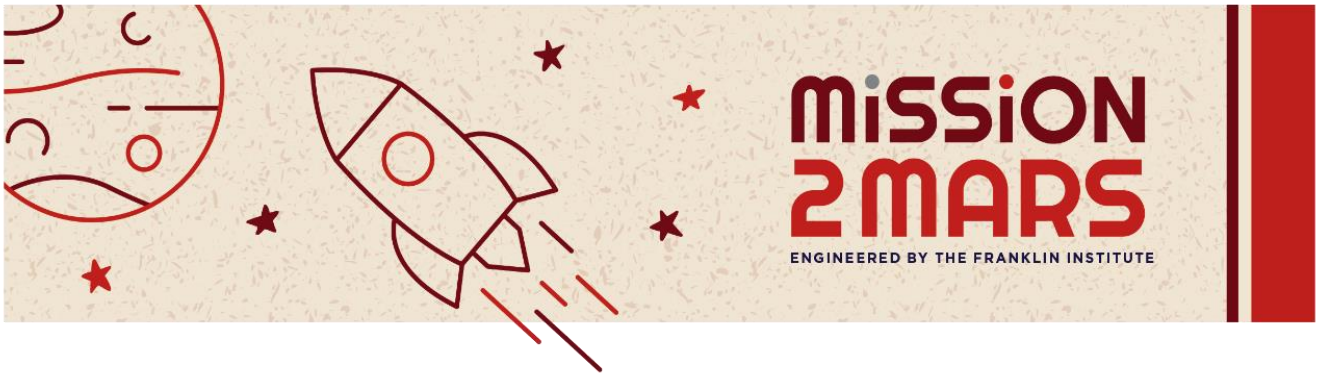
One Week Before Your Star Party:

- **Begin tracking the weather forecast three days before the big event.**
    - Ideal conditions: clear sky forecast with no chance of rain
        - Clear to mostly clear sky is best. 'Partly cloudy' is too ambiguous. Which part of the sky would be cloudy and which would not be cloudy under a partly cloudy forecast?
        - Unless the rain will occur well-before your event time of well-after and skies are forecast to be clear in-between. It may be that there's no chance of rain, but skies will be overcast throughout your scheduled program time. Telescopes don't see through clouds!
    - Make a contingency plan. Consider what you'll do if the weather doesn't cooperate.

- **Plan where to position your materials, way-finding signs, astronomers with telescopes, and support staff.**
    - Anticipate the crowd flow.
    - Look around for the best location to position the telescope and for all to see the sky well.
    - Will you need any additional illumination for walking on paths or near the materials table?

- **Use the *M2M Event Planner* to keep track of the event details.**
    - Alert your facility about the expected crowd and make sure you have engaged more than enough support staff for your anticipated audience.
    - Make sure you prepare way-finding signs if necessary.
    - Anticipate basic building functions:
        - Do you know how to turn on/off the lights?
        - Do you know who has a key to the facility?
        - Do you know how to unlock the bathrooms? Turn on the water?Do you have enough toilet paper?
        - Locate the closest electrical outlet

- **Check in with your amateur astronomer.**



On the Day of Your Star Party:

- **Check the weather forecast!**
  - Activate your contingency plan for poor weather, if needed.

- **Get there early—at least an hour before participants will arrive.**
  - Unlock the facility.
  - Put out any way-finding signs
  - Make sure bathrooms are unlocked, that water is turned on and ready for use.
  - Set up any tables, chairs, trash receptacles, additional illumination.
  - Set up materials for distribution (and prevent them from flying away).

- **Prepare the staff for their roles.**
  - Remember to employ **Core Four** techniques for engagement and facilitation
    - **Ask Questions**
      - Ask *open-ended* questions—questions with multiple possible responses—to help guests explain their thinking.
      - Ask *closed-ended* questions—questions with one or a few possible responses—to guide guests toward a particular area of focus.
    - **Encourage Scientific Thinking**
      - During science explorations, point out occasions when guests notice things, guess what will happen, test a new idea, or learn from something that didn't work.
      - Model scientific thinking yourself. If you don't know the answer to a question, respond with: *I don't know! Let's find out together!*
    - **Cultivate Rich Dialogue**
      - Define and use key vocabulary during the explorations.
      - Encourage guests to connect their ideas and discoveries back to words and concepts from earlier discussions.
      - Invite guests to explain their ideas to each other during their explorations.
    - **Make Connections**
      - Draw connections between everyday experiences and the science activities and concepts by asking about guest experiences relating to the topic
      - Introduce guests to science role models who reflect their race, ethnicity, gender, and/or cultural background, either in person or through books, photos, articles, or credible websites.