2023 DENVER METRO REGIONAL SCIENCE AND ENGINEERING FAIR

PROJECT MATERIALS GUIDE

Rules, requirements, and recommendations for creating an award-winning science fair display!



IN-PERSON MATERIALS REQUIRED

Poster Board: a flat or trifold board that contains all the necessary components to fully present your project at the fair. Please note no easels will be provided and posters must be able to stand on their own.

IN-PERSON MATERIALS OPTIONAL

Demonstrations
Visual Aids
Lab Notebook





VIRTUAL MATERIALS REQUIRED

Project Presentation Slides: PDF document of up to 12 slides containing all project details that would typically be on your poster board.

Project Introduction Video: A 3-minute video that introduces the viewer to your project. In other words, your research 'Elevator Pitch'!

VIRTUAL MATERIALS OPTIONAL

Demo Video
Supporting Documents

NEED IDEAS? CHECK OUT LAST YEAR'S VIRTUAL PRESENTATIONS HERE!

Physical Poster Board Instructions

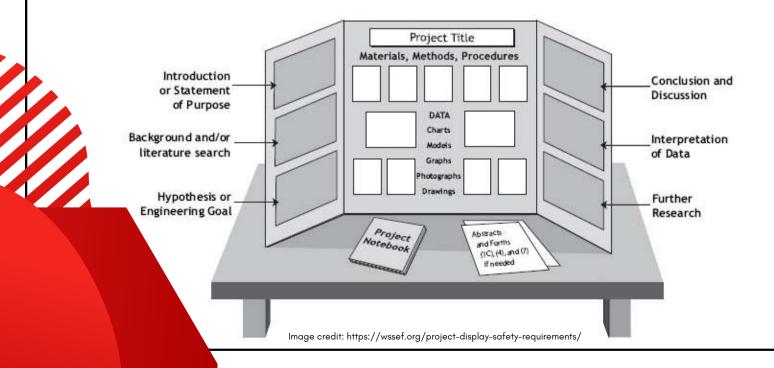
MAXIMUM DIMENSIONS

Depth (front to back): 30 inches or 76 centimeters Width (side to side): 48 inches or 122 centimeters Height (floor to top): 108 inches or 274 centimeters

SAMPLE POSTER LAYOUT

The following elements should be included on your project board: Introduction and question or statement of purpose, background research, hypothesis or goal, data and interpretation of data, conclusion, discussion, and further research goals.

See the example below; however, we encourage you to implement your own creativity in making your display area reflect you and your project.



In-Person Display and Safety

PHOTOGRAPHS & IMAGES

Any photograph/visual image/chart/table and/or graph is allowed if:

- It is not deemed offensive or inappropriate (including, but not limited to images/photographs showing invertebrate or vertebrate animals/humans in surgical, necrotizing or dissection situations).
- It has a credit line of origin ("Photograph taken by..." or "Image taken from..." or "Graph/Chart/Table taken from..."). If all images, etc. displayed were created by the finalist or are from the same source, one credit line is sufficient.

THINGS TO AVOID

- Any information or items that are self-promotions or external endorsement (This includes brands/logos, trademarks, references to an institution or mentor, etc.)
- Any items intended for distribution such as disks, CDs, flash drives, brochures, booklets, endorsements, give-away items, business cards, printed materials or food items
- Postal addresses, websites, email and/or social media addresses, QR codes, telephone and/or fax numbers of a project or finalist
- Active Internet or email connections as part of displaying or operating the project

NEW THIS YEAR

- Acknowledgments on the project display are no longer prohibited; in alignment with the ISEF ethics statement, students may recognize those that have supported their work in a section on the display.
- Student-created logos are to be properly credited within the photograph/image display requirements but are no longer restricted to one instance on the display.



Do Not Bring These Things to the Fair!

PROHIBITED DISPLAY ITEMS

- 1. Living **organisms**, including plants
- 2. Glass (excluding device screens)
- 3. Soil, sand, rock, cement and/or waste samples, even if encased in a slab of acrylic
- 4. Taxidermy specimens or parts
- 5. Preserved vertebrate or invertebrate animals
- 6. Human or animal food
- 7. Human/animal parts or bodily fluids (for example, blood, urine)
- 8. **Plant materials** (living, dead, or preserved) that are in their raw, unprocessed, or non-manufactured state
- 9. All chemicals including water. No liquids can be utilized in the Project Display
- 10. All **hazardous substances or devices** (Example: poisons, drugs, firearms, weapons, ammunition, reloading devices, grease/oil and sublimating solids such as dry ice)
- 11. Items that may have contained or been in contact with **hazardous chemicals** (Exception: Item may be permitted if professionally cleaned and documentation for such cleaning is available). Filters (including microbial) may not be displayed unless the Display
- & Safety Committee can determine that the device was cleaned or was never used
- 12. **Sharp items** (for example, syringes, needles, pipettes, knives)
- 13. Flames and highly flammable materials
- 14. **Batteries** with open-top cells or wet cells
- 15. Drones or any flight-capable apparatus unless the propulsion power source removed
- 16. 3D Printers unless the power source is removed
- 17. Inadequately insulated apparatus capable of producing dangerous temperatures
- 18. Any apparatus with belts, pulleys, chains, or **moving parts** with tension or pinch points that are not appropriately shielded
- 19. Any display items that are deemed **distracting** (i.e. sounds, lights, odors, etc.)
- 20. Any apparatus or material deemed unsafe by the Display & Safety Committee

SEE THE ISEF RULE BOOK FOR A COMPLETE LIST OF RULES AND REGULATIONS

Required Virtual Materials



PROJECT PRESENTATION

- Project Presentation must be a single PDF document of no more than 12 pages.
- Page size must not exceed $8\frac{1}{2}$ " x 11" and should be in Landscape orientation.
- The PDF document must not include any animations or active hyperlinks (except for original source material in the references).
- The information on each page must be readable.
- The PDF document must open with the default magnification set to "Fit Page" so that the entire page is visible at the same time.
- All Project Presentation elements must conform to the same Display & Safety rules as the in-person fair. See page 4 for details.

DESIGNING YOUR SLIDES:

We recommend starting with one of the following pre-made templates:

- Science Projects

 PowerPoint Template | Google Slides Template
- Engineering Projects

 <u>PowerPoint Template</u> | <u>Google Slides Template</u>
- Math/Computer Science Projects

 <u>PowerPoint Template</u> | <u>Google Slides Template</u>

If using provided templates, do not change the page settings on the template – they are set up so that the template will print to pdf with the correct page size $(8\frac{1}{2}$ " x 11") and orientation (Landscape).

You may add more slides as needed to the template, up to a maximum of 12 printed pages

Please be aware that if your progress to future competitions, your presentation may need to be adapted to fit their (stricter) requirements, such as black font on a white background.

At DMRSEF, however, you are encouraged to use your creativity to engage your audience in your project as long as you remain mindful of both professionalism and readability.

<u>CLICK HERE</u> to visit the 2022 DMRSEF Virtual Project Showcase for inspiration!



DMRSEF Staff will be hosting a Presentation Preparation call on 1/18/2023 over Zoom, you can register HERE to join!

PROJECT VIDEO

What to include in your video?

Introduce Yourself:

- State your full name
- You may include your school and/or town if you wish
- Rather than reciting your project title, consider explaining your project in one or two sentences.

Explain Your Project:

- Summarize your research:
 - What did you do?
 - What did you find?
 - What conclusions did you draw?
- You may use props or visuals as long as they are within the Display & Safety guidelines (see page 4).

Tips for Filming:

- Film in a well-lit and non-distracting environment
- For best results, film your video horizontally (landscape).
- Keep the camera still and in place during filming.
- Speak clearly and loudly enough that the recording is able to pick up every word you say.
- Avoid long pauses and filler phrases
- Listen to your video after recording to ensure your voice is clear and audible, and that the video has not picked up too much background noise.



Posting and sharing your video

Your introductory video **must be linked from YouTube,** demos and optional materials may be uploaded into google drive. See below for full instructions.

- In YouTube, your video may be uploaded and posted as "unlisted" so that only those with a direct link can access it.
 Unlisted videos are not searchable or available to the public. You can choose to list your video publicly but should check with your parent or guardian before doing so.
- Google Drive is also a sharing option.
 Remember to set permissions so that anyone with the link can view your video.

Please Remember:

- Videos should be no longer than 2-3 minutes and should broadly summarize your project.
- Students are the only individuals allowed to appear in the video, however, they are not required to do so.



DMRSEF Staff will be hosting a Video Preparation call on 1/25/2023 over Zoom, you can register_HERE_to join!

Optional Virtual Materials

DEMO VIDEOS

If there is a component of your project (e.g. a device) that you would like to demonstrate, you will have the option to upload an additional video.

- The project demo video must be no longer than 1-2 minutes.
- Props/visuals used must not violate any normal D&S safety guidelines for in-person science fairs (see page 4).
- Student researchers must follow all risk assessment protocols outlined in their Form 3 (e.g. use proper PPE in the video).
- The project demo video may include people other than the student researcher(s)
- as long as they are not identifiable (no faces).
- Supplementary video materials must also be uploaded to YouTube in order to share.

SUPPORTING DOCUMENTS

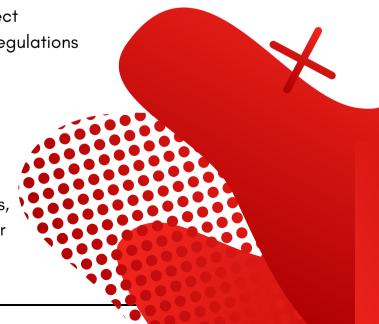
If you would like to include a section of your project notebook or other supporting materials, you may do so. Please note that this is considered supplementary information that is not included in the judging rubric. You will not be penalized if you choose not to include these materials.

- This single document should be no more than 12 pages and can include, but is not limited to:
 - Up to 12 pages of a lab notebook
 - o Written work relating to your project
 - o Photos in compliance with D&S Regulations

Remember:

Your virtual display is meant to represent your project entirely on its own!

The virtual fair will be open to judges and community members prior to interviews, and they should be able to understand your project without you there to explain it for them.



VIRTUAL DISPLAY AND SAFETY RULES



Please be sure your virtual display contains none of the following:

- Brand logos, trademarks, flags, patent status (written or graphic), awards or medals.
- Personal information (addresses, social media accounts, phone number, etc.) of finalist.
- Prior year's written material or visual depictions.
- Anything labeled as "Abstract".
- Animations or active hyperlinks.

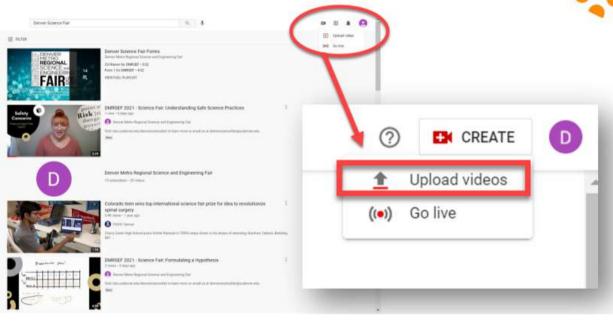
Photographs, visual images (including background images), charts, tables and/or graphs <u>are</u> allowed if:

- They are properly credited.
- If all photos, images, graphs, etc. were taken or created by the student researcher, then a single statement to that fact should be placed on the Title Page of the Project Presentation.
- If the photos, images, graphs, etc. come from different sources, then EACH individual photo, image, graph, etc. must have its own credit line below it.
- They are not deemed offensive or inappropriate (which includes images/photos/videos showing vertebrate animals/humans in surgical, necrotizing or dissection situations) by the SRC, Display & Safety Committee or DMRSEF staff.
- They are from the Internet, magazine, newspaper, journal, etc. and a credit line is attached immediately underneath it.
- They are photographs or visual depictions of the student presenter(s).
- They are photographs of a person other than that of the student presenter(s) as long as there is a photo release signed by the subject, and if under 18, also by the guardian of the subject. Photo releases must be uploaded with the researcher's project plan for verification.

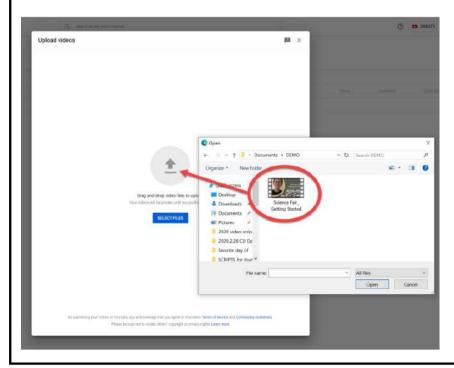
SEE THE ISEF RULE BOOK FOR A COMPLETE LIST OF RULES AND REGULATIONS

UPLOADING AN UNLISTED VIDEO ON YOUTUBE

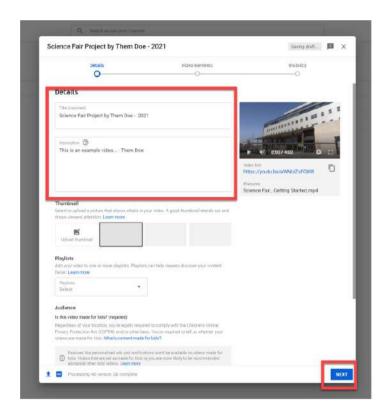
LOCATE THE "CREATE" BUTTON IN THE UPPER RIGHT-HAND CORNER OF YOUTUBE.

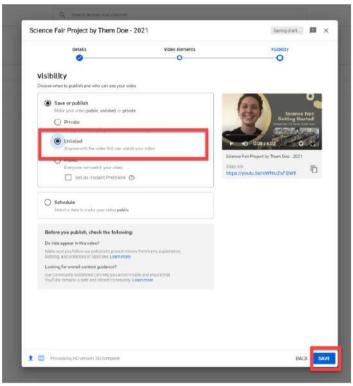


SELECT "UPLOAD VIDEOS" AND SELECT THE FILE YOU WISH TO SUBMIT:



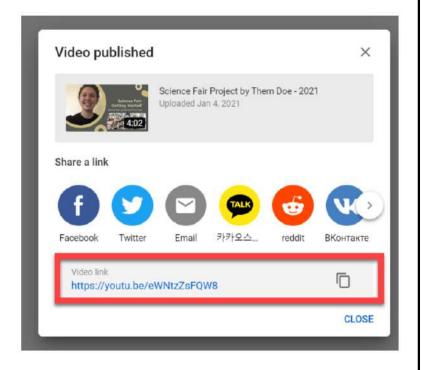
TITLE YOUR VIDEO AND FILL IN APPROPRIATE DESCRIPTIONS AND OPTIONS. UNDER "VISIBILITY", SELECT "UNLISTED" AND SAVE YOUR UPLOAD.



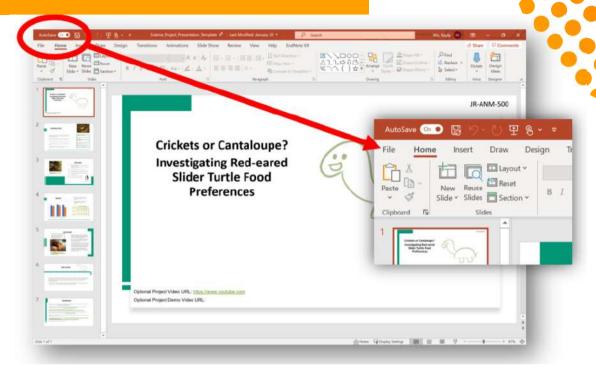


THE LINK PROVIDED IS THE CUSTOM URL FOR YOUR VIDEO.

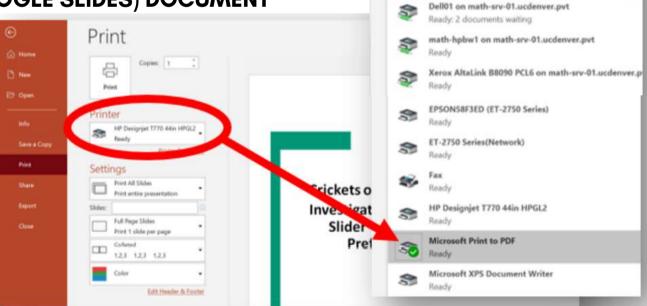




SAVING YOUR POWERPOINT AS A PDF DOCUMENT



LOCATE "FILE" IN THE UPPER LEFT-HAND CORNER OF YOUR POWERPOINT (OR GOOGLE SLIDES) DOCUMENT



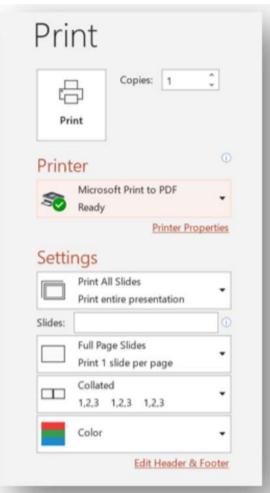
Printer

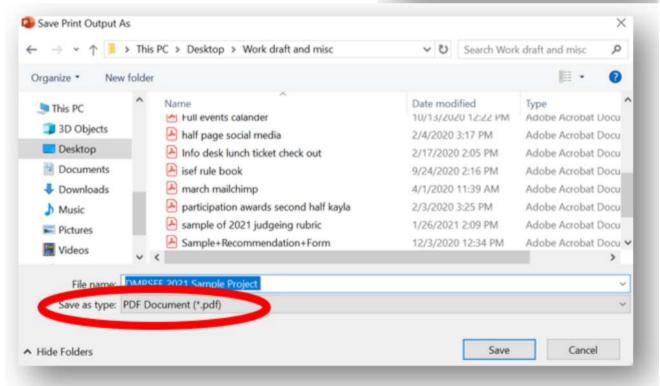
Microsoft Print to PDF

SELECT PRINT, AND CHANGE THE SELECTED PRINTER TO "PRINT TO PDF"



ADJUST SETTINGS TO PRINT THE CORRECT SLIDES, IN ORDER. THEN HIT "PRINT".





BE SURE TO TITLE AND SAVE YOUR PROJECT.

DOUBLE CHECK TO BE SURE "SAVE TYPE AS"

INDICATES YOUR FILE IS IN PDF FORM