

ANNUAL NEMA POSTER CONTEST FOR STUDENTS IN GRADES 3 THROUGH 12

*...with prizes for winning posters,
such as mine tours, a Mining Adventure Day at The Havey Quarry,
and possibly a week at a Rock/Mineral camp, among others.*

Are you a student in 3rd through 12th grade that resides in New England? Here is your chance to study gems, geology, and minerals and present your results in a display at the New England Mineral Conference (NEMC). Winners receive prizes and are invited to be our guests at both Education Day and the Friday evening session of our annual Conference.

WHAT ARE IMPORTANT DATES FOR THIS YEAR?

**Submission Deadline: Friday, April 12, 2019 to
NEMApostercontest200@gmail.com**

Announcement of Winners: Monday, April 22, 2019

Presentations of Awards: Friday, May 10, 2019

Display of Posters at NEMC: Friday & Saturday, May 10 & 11, 2019

WHAT ARE THE JUDGES LOOKING FOR?

We have a panel of judges from across the gem, geology and mineral world in New England that are looking for the following. They use a rubric to be as objective as possible. (You can find it <http://nemineralassociation.org/education/rubric.pdf>.)

Is the poster topic **related** to New England rocks, minerals or gems?

Does the poster show that the student **understands** the key concepts of their subject?

Does the poster show the student **analyzed** their topic and used their analysis to support the conclusions? (How do I do that? By using a data table, graph or other analysis, such as comparison, or data from an experiment you conducted).

Has the student given **conclusions** that are complete, well-organized and connected to what they've presented?

Did the student use a variety of **sources**? Did they list those on their poster?

Is the poster neat, readable, visually clear, well-organized? Is it **appealing** to the eye?

Does the poster show that the student's work has **original** conclusions, and a unique approach to their topic? If possible, did the student use original research?

WHO CAN ENTER?

Any student (public, private, homeschooled) that is in New England in grades 3 through 12. You can work alone, or as a group. We just want you to learn more about rocks, minerals and gems in New England, to have fun doing it, and to be recognized for your good efforts! These are the four entry categories:

- 3rd through 5th grade
- 6th through 8th grade
- 9th through 12th grade
- Small Group

I'M INTERESTED. HOW DO I MAKE AND SUBMIT A POSTER TO NEMA?

Here's our definition of a Poster Session: "A graphic and concise way that researchers present their studies." We want this to be simple for you, a fun way to learn something about geology, minerals, and rocks, and will hopefully ignite a spark in you to learn more. You don't have to make a physical poster or print one; we'll take care of that. You send us a digital file, and we'll take it from there. We do want you to **think** about what you're learning, so we are looking for evidence of your analysis of information, by use of a data table, graph or written or visual comparisons.

Here are the guidelines:

1. Each poster must be submitted electronically to NEMApostercontest200@gmail.com.
2. A Poster Session Entry Form *must accompany your poster submission*. Both home and school contact information is required, so we can contact the winners and award their prizes.
3. Get it to us by the deadline. Send it to us as a pdf or doc. We don't have the ability to convert other specialized programs.
4. Make sure all the fonts on your poster are AT LEAST 18pt.
5. Make sure your poster is in PORTRAIT format (*not landscape*) and must fit 24" wide x 36" high.
6. Your poster needs to speak for itself; no audiovisual equipment can be used for it, including laser pointers.
7. We won't be editing your poster for you, which means we will not fix spelling or formatting errors. Please make sure your poster comes to us finished.
8. For group projects, each participant must fill in their personal information on an individual Entry Form, naming the others in the group on the appropriate line.

9. Posters chosen as winner will be notified and will be invited to attend the opening session of the Conference. Prizes will be awarded in each of the following categories:
 - 3rd through 5th grade
 - 6th through 8th grade
 - 9th through 12th grade
 - Small Group (maximum of three members)
10. Glogster or any other poster-making programs are not allowed.
11. Posters will remain on display throughout the conference.

NOTE: The most accessible way to create a large poster is by using Google Drawing or Google Slides, and change the size under "File> Page Setup> Custom> 27 x 36 inches." Students work at it as a drawing, and when it is finalized and check for spelling they can save it as a doc or pdf file and sent it to NEMA. Here is a great website that explains the process:

<http://www.educatorstechnology.com/2013/04/9-easy-ways-to-create-classroom-poster.html>

For readability, we find it best if students use font sizes of at least 36 for text and at least 48 for titles.

Remember to submit the Poster Session Entry Form and Permission Slip with the poster art.

HOW DO I FIGURE OUT A TOPIC?

Topics can be picked by students and/or their teachers. Posters with gem & mineral themes related to New England will be given preference over non-mineral posters. Make your topic broad enough to you can analyze the information and come to your own conclusions. Hand-on experiments or original research are highly encouraged.

We want you to be creative and use your imagination. Here are some ideas to get you started on your thinking:

- Analyze a nearby rock outcrop or mineral collecting site
- Compare the types of rocks and minerals in a stream to the rocks found upstream or downstream. Or from one rock area near you to another area.
- Grow different kinds of crystals under different conditions and report about it.
- Collect and analyze possible micrometeorites (You can research methods to do this on the internet.)
- Collect local rocks & minerals or fossils and use them to analyze how the local landscape was formed.
- Analyze common object to learn which rocks and minerals were used in their manufacturing.
- Construct molecular models of minerals and use them to explain properties of the mineral.
- Comparing mineral and/or gem stone colors and color spectrums of the same mineral
- Compare New England gemstones

- Research how gemstones are cut and polished
- How were the different rocks & minerals in Maine and New England formed?
- Research how New England Minerals are used: eg. lepidolite, spodumene, mica, quartz.
- Some aspect of the history of mining for minerals in Maine. Historical mining in Maine for feldspar, quartz, beryllium, mica, pollucite, copper, silver, iron, limestone, mineral specimens and gems. How do the mining techniques differ?
- Famous Maine miners and/or mines (current or past)
- Interview with a miner or anyone in the geology field. Analyze what you learn.
- New England fossils; what do they teach us about the Earth.
- Careers in geology
- Collect evidence on how rocks and minerals in your area were formed.
- What causes minerals to have different properties?
- How can we test different rocks and minerals?
- What makes a good gemstone?
- What rocks fluoresce, and why?

RESOURCES ON ACADEMIC POSTER SESSIONS:

<http://writing.colostate.edu/guides/guide.cfm?guideid=78> (a good all-around synopsis of poster sessions)

<http://www.ploscompbiol.org/article/info:doi/10.1371/journal.pcbi.0030102> (aimed more at post-graduates and a bit technical, but contains good advice)

<http://www.ncsu.edu/project/posters/> (It's an electronic poster...on poster sessions!)

<http://www.personal.psu.edu/drs18/postershow/> (and, another...)

<http://mrlibrarydude.wordpress.com/2013/03/04/poster-presentations-101-creating-effective-presentations/> (The mother lode...)

Study Resources for topic ideas:

<http://geology.teacherfriendlyguide.org/index.php/northeast>

http://www.maine.gov/dacf/mgs/explore/explore_map.shtml

<http://www.maine.gov/dacf/mgs/education/lessons/index.shtml>

See also the ['Links' page on the NEMC website](#) for reading and study resources.

THE FINE PRINT

We have adopted some rules from the International Rules and Guidelines for Science Fairs, the Society for Science & the Public, and the Rules of the Maine Science Fair.

Ethics Statement

Scientific fraud and misconduct are not condoned at any level of research or competition. This includes plagiarism, forgery, use or presentation of the researcher's work as one's own, and fabrication of data. Fraudulent projects will fail to qualify for competition. The New England Mineral Association reserves

the right to revoke recognition of a project subsequently found to have been fraudulent.

Eligibility/Limitations

1. A student must be in grades 3–12 or equivalent and not have reached age 20 on or before the annual poster entry submission date.
2. Each student may enter only one project.
3. Team projects may have two or three members. Teams may not have had more than three members. Teams may not substitute members in a given research year.
4. A research project may be a part of a larger study performed by professional scientists, but the project presented by the student must be only their own portion of the complete study.

All Projects

1. All projects must adhere to the ethics statement above.
2. Projects must adhere to local, state and U.S. Federal laws, regulations and permitting conditions.
3. No potentially hazardous biological agents may be used in your research.
4. No hazardous chemical, activities or devices may be used in your research.
5. Introduction or disposal of non-native species, pathogens, toxic chemicals or foreign substances into the environment is prohibited.
6. Exhibits must adhere to NEMA display requirements.

NEMC Display and Safety Rules

Only flat printable posters are allowed. They must be submitted electronically/digitally.

Size Limitations - 24 in (61 cm) wide, 36 in (91.4cm) high in portrait format. Preferred submission is a pdf or doc format. Do not use a specialized program. Submissions should be sent by the annual poster entry submission date, to: NEMApostercontest200@gmail.com.

Not Allowed in the Project

- Awards, medals, business cards, flags, endorsements, and/or acknowledgements (graphic or written) unless the item(s) are an integral part of the project.
- The project will consist solely of the poster submitted electronically and shall not include any electronic equipment or movie files. No overlapping panels or overlays are permitted.
- The participant's name, address, town, phone number, e-mail, web address, and school name should not appear on the project.
- The participant's name will be placed on the back of the project by NEMA staff.

Allowed at Project BUT with the Restrictions Indicated

- Photographs and/or visual depictions if sources are credited. For example: "Photographs taken by finalist." Photographs of participants are allowed, provided participants are not identified by name.

2015 JUDGES SCORING SHEET FOR New England Mineral Conference Poster Contest

Judges Initials:

Student/School: _____

POSTER CONTENT							
Score	0	1	2	3	4	5	SCORE
Explanation:	Not at all	Major misconceptions, gaps between observations and conclusions, ineffective, inadequate, inappropriate	Some misconceptions, minimally effective, somewhat appropriate	Complete, accurate, effective, appropriate	Complete, very detailed, logical, ideas well supported, well organized, all details appropriate	Profound, in depth, insightful, extremely effective, observations & conclusions point to a well-rounded and effective management plan	Final score for category
Related to New England : Relates their topic to New England rocks,minerals.or gems.							
Understanding: Understands the key concepts of their subject.							
Analysis: Shows evidence of analysing their learning with a data table, graph or other analysis such as comparing two or more things, or data from an experiment.							
Conclusions: Conclusions are complete, well organized and connected to the information presented.							
Sources: A variety of sources are used and listed for their poster.							
Originality: The work shows original conclusions and a unique approach to the topic, where possible based on original research.	Not at all, copied from sources	Minimal original thinking]	Expresses personal reactions to the information collected.	Original conclusions based on the information gathered.	Unique approach and original conclusions	Unique approach and conclusions using information based on information gathered and personal experience and research	
Visual Appearance: Appealing to the eye, readable, neat, visually clear,and are well organized.Spelling is correct.	Not at all	Major flaws	Minor flaws	Correct, adequate	Information is detailed and presented in an organized manner	Creative, very effective	
Comments:						TOTAL SCORE:	