

2020 STATISTICS POSTER COMPETITION

Statistics Poster Competition for Grades 10-12

Sponsored by
Pittsburg State University Department of Mathematics
and MOKAN Council of Teachers of Mathematics

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WHAT IS A STATISTICS POSTER?

A statistics poster tells the story of a data set. Numbers and graphs are used to give voice to the truth behind the data. Whether the summary is a bar chart, histogram, or table of numerical summaries the focus should always be on the meaning behind the data. In a well-done statistics poster the reader is able to discover the story behind the data by following the logical progression of the poster. The emphasis is on the visual display of results through well-placed graphs.

WHO CAN ENTER THE COMPETITION?

All students in grades 10 through 12 residing in Kansas, Missouri and Oklahoma, are eligible to participate.

HOW CAN I ENTER?

- There is no entry fee!
- Registration form **securely affixed** to the back of the poster.
- Note: Multiple entries may be mailed together but must have separate registration forms. Please send entries flat between taped sheets of cardboard. **Do not send posters rolled in a tube.**
- **Posters must be postmarked by March 12, 2020.** They should be delivered to:

Department of Mathematics
Pittsburg State University
1701 S. Broadway
Pittsburg, KS 66762

- **Prize winners will be notified by April 1, 2020**

RULES

- Posters are to measure between 18 to 24 inches by 24 to 30 inches.
- Any weight of paper is permitted. Standard poster board is recommended.
- Be sure that anything attached to the front of the poster is affixed securely. Do not attach perishable items.
- Posters must be the original design and creation of the students.
- At least two graphs are required. The two graphs should impart different information (e.g., a bar graph and a pie chart of the same variable does not meet this criteria). Computer generated graphs are acceptable.
- Subject matter is the choice of the participants. Data may be original or published. For published data, a reference must be given.
- A brief description including the method of collection and purpose must be securely attached to the back of the poster.
- Posters and the brief description must not contain any marks, names, or information that reveal the identity of the individual, team, school, or location.
- Students may work individually or in teams. The team may have up to four students.

PERMISSIONS

By submitting a poster, students give permission for their work to be displayed at various conferences, special events, in publications and promotional material, and in electronic format on the Internet. Posters become the property of the competition organizers and are not returned. The top entries will be submitted to the American Statistical Association Poster Competition. <https://www.amstat.org/asa/education/ASA-Statistics-Poster-Competition-for-Grades-K-12.aspx>

JUDGING AND PRIZES

Entries will be judged on the basis of:

- **Overall Impact of the Display (Poster Design)**
Poster design aspects, colors/patterns, grammar, spelling, dimensionality, readability, neatness
- **Technical Aspects (Statistical Correctness)**
Age-appropriate use of statistical methods, calculations, and interpretation
- **Clarity of the Message (Statistical Process)**
How well is the four-step investigative process implemented?
How well is a story told?
Stands alone, even without the explanatory paragraph on the back
- **Appropriateness of the Graphs for the Data**
Statistical appropriateness of graphics
- **Creativity (Topic Is of Interest)**
Data collection methods, sample size issues, who cares factor

Prizes in the amounts of \$50, \$30, and \$20 will be awarded to 1st, 2nd, and 3rd place. Winning entrants' schools will receive plaques signifying the honor. Honorable mention certificates will be awarded also. Winning posters will be displayed at area shopping malls.

This contest is modeled after Michigan's Poster Contest. Students may wish to view their site, as well as other statistics poster web sites, for point of reference.

References:

Michigan Statistics Poster Competition:
<http://www.gvsu.edu/stat/mspc-homepage-22.htm>

The entry form, affixed to the back of the poster, must accompany each entry. There should not be any identifying information on the poster itself.

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**2020 STATISTICS POSTER COMPETITION
ENTRY REGISTRATION FORM**

Title of Poster: _____

Full Name of School: _____

Address: _____

City: _____ State: _____ Zip: _____

Teacher/Advisor Name: _____

Teacher/Advisor E-Mail: _____

Teacher/Advisor Signature: _____

Phone: _____

Student(s) Names:

1. _____ Grade: _____

2. _____ Grade _____

3. _____ Grade: _____

4. _____ Grade: _____

I/we verify that this is my/our original work and will become the property of Pittsburg State University.
