

EngineerGirl Essay Contest 2017

COMPETITION RULES AND REQUIREMENTS



What are the Entry/Submission Requirements?

Participants will create and submit an original essay that responds to the following contest prompt:

Engineers affect everything about the way people live, so it is not surprising that they also have a big impact on the animal world. Environmental engineers, for example, are often tasked with evaluating projects in order to minimize negative effects on valuable animal species. In some cases, engineers have developed ingenious solutions to help animals and people share the planet.

The International Union for the Conservation of Nature (IUCN) maintains a list, known as the IUCN Red List, which ranks the conservation status of thousands of species. For your essay, choose an animal that is ranked by IUCN as either: vulnerable, endangered, or critically endangered. Learn about the animal and consider how engineering might improve life for that species. To prepare your essay consider the following questions:

- Why did you choose this species, and what problem or problems does it face?
- What ideas have already been tested that may help to design a solution and begin solving those problems?
- What specific solution would you suggest to help solve the problems faced by this species?
- Aside from the animals, who would benefit from your proposed solution?
- Are there any policies or standards currently in place that would affect the way your solution could be implemented?
- Who would have to be involved in implementing the proposed solution?
- Who should fund the proposed solution?

To enter the contest:

Elementary Students (Grades 3-5):

Imagine that you are an engineer. Identify an organization that might implement your proposed solution and write a letter to the leader of that organization. In your letter, describe your proposed solution in detail, explain how it should be implemented, and discuss why it is important to implement. To strengthen your submission think of questions the leader may have about your solution, and attempt to answer them in your letter.

Middle School Students (Grades 6-8):

Imagine that you are an engineer working with an organization to implement your proposed solution. Write a project summary for the organization's public relations (PR) department. Describe the solution in detail and explain what is new or novel about your approach. Identify who would be involved in the design, testing, manufacturing, and distribution stages of the project and how they work together to implement the solution. Your summary has to provide the PR department with enough information that they can respond to questions about and help promote the project.

High School Students (Grades 9-12):

Imagine that you are an engineer in an engineering firm poised to implement your proposed solution in a specific location and/or situation. Write a proposal to the organization that would fund this project. Describe the solution in detail and explain how and why it should be implemented. Describe the expertise available at your imaginary firm and explain how any other groups might need to be involved in the design, manufacturing, and distribution processes. Explain what has already been tried or is already known about this type of solution and what would be new or innovative. Describe how you will test or anticipate failure for any new innovations to minimize risk. Describe exactly what this project would aim to achieve, and make a case for why the cost would be justified.

Guidelines for length:

- Grades 3–5: 400 to 700 words
- Grades 6–8: 600 to 1100 words
- Grades 9–12: 1000 to 1500 words

References Guidelines:

All essays must be original work, and resources must be clearly cited.

For each reference you use to research your essay, include the following four pieces of information in the references section:

- *Title* – The name of the resource. A resource can be a webpage, article, person, or other reference.
- *Author* – The person who wrote or created the resource. There may be multiple authors or sometimes an author can be an organization. If you cannot find an author you may write, "No Author Available."
- *Date* – The date the resource was created. If there is no date (for example on a webpage) the citation should include the date the page was reviewed for your essay.
- *Location* – Where we can find the resource. For webpages this is the URL. For printed resources include the publisher.

For questions about citation format, please refer to the APA citation style.

To submit an essay, entrants must complete the online Entry Form at <http://www.engineergirl.org/EssaySubmission.aspx>

The Competition opens September 15, 2016, and will close at 6:00 PM, February 1, 2017, U.S. Eastern Standard Time. All entries must be received prior to this date and time in order to be considered.

Finalists will be notified in writing via email by May 1st 2017 and will be required to submit a signed copy of the EngineerGirl Use License and Release giving the NAE permission to publish the entry should it be selected as a winner.

Each entrant is solely responsible for the information, data, text, graphics, and other materials included in the Submission, whether publicly posted or privately transmitted. A Submission must be original and the entrant must (1) hold all necessary rights to all the materials and information in the Submission or (2) have permission from the holder of such rights, or (3) the materials and information in the Submission must be in the public domain. Winners will have to ensure that they have all rights necessary to permit them to transfer ownership of the essay, including transfer of any permissions and rights obtained from third parties, to the NAE.

A Submission may not contain offensive, libelous, sexually explicit, disparaging or other inappropriate content and may not defame or otherwise violate the rights, copyrights, trademarks, or rights of publicity, privacy, or reputation of any third party. A Submission may not contain any material to promote sale of a product or service.

Who Is Eligible to Compete?

The contest is open to individual girls and boys in the following three competition categories:

1. Elementary School Students (grades 3-5)
2. Middle School Students in (grades 6-8)
3. High School Students (grades 9-12)

The category for entry must be based on US grade categories. Home schooled or international students who are unsure of their grade should choose an appropriate category based on where the student would be placed if attending public school in the US. Prior winners of the Essay Contest who have received a cash prize from *EngineerGirl* in any of the above grade categories may not enter again in the same age group.

Employees of the National Academies of Sciences, Engineering, and Medicine and their immediate families or those living in the same household as a National Academies employee are not eligible to enter this competition.

Entrants may enter one Submission in one of the three competition categories. Entrants must select one competition category at the time of their entry. Each individual contest participant is restricted to one Submission only.

How Will Entries be Judged and by Whom?

Submissions will be judged by a slate of volunteers that include professionals from various engineering fields.

Finalists will be judged by the *EngineerGirl* Steering Committee that includes distinguished professionals in engineering and engineering education. Members of the judging panel will consider the following criteria in making their selections:

1. Effectiveness in communicating ideas and fully addressing the requirements of the contest;
2. Accurate research and analytical thinking;
3. Creativity and originality in the content selection and presentation

The decisions of the judges are final and incontestable.

What are the Prizes, and How will They be Distributed?

Winners in each grade category will receive the prizes listed below:

- First-place winners will be awarded \$500.
- Second-place entries will be awarded \$250.
- Third-place entries will be awarded \$100.

All winning entries will be published on the EngineerGirl website. Honorable Mention entries will not receive a cash award but will be published on the EngineerGirl website.

Prize funds will be distributed to an individual winner (or the winner's parent or guardian, if the winner is under 18 years old). Any federal, state, and local taxes, and all similar fees and assessments, are the sole responsibility of the prize recipient.

Additional Requirements and Disclaimers

By entering this competition, each individual entrant (for individuals under 18 years old, the individual's parent or guardian) grants the NAE a worldwide nonexclusive, royalty-free, transferable license to use the essay, or any portion thereof, for NAE purposes, and grants NAE a world-wide, non-exclusive, royalty-free, transferable license to use the entrants' names, likenesses, photographs, and/or biographical information for advertising, publicity, and promotional purposes.

If selected as a winner, each individual (and for individuals under 18 years old, the individual's parent or guardian) hereby agrees to irrevocably grant and assign exclusively to the NAE all rights, including copyright interests in the essays, under all laws, treaties and conventions throughout the world, in all forms, languages and media, now or hereafter known or developed without limitation. Use, publication, or dissemination by winners of their respective essay may be permitted at the discretion of NAE, as approved in writing in advance by the NAE. Submitting an essay to this competition does not guarantee that the Submission will be displayed or used by NAE.

Use by NAE of a Submission does not necessarily reflect the views of the NAE, and in no event shall NAE assume or have any responsibility or liability for any Submission, in whole or in part, or for any claims, damages, or losses resulting from the use and/or appearance of any Submission or the contents thereof.

NAE reserves the right to refuse any Submission in its sole discretion. NAE also reserves the right at any time during the competition to remove or disqualify any Submission when it believes in its sole discretion that the entrant has: (i) infringed any third party's copyright; (ii) failed to comply with these Terms and Conditions; or (iii) failed to obtain the necessary consents as set out in these terms and conditions.

NAE shall not be liable for any claims, costs, liabilities, damages, expenses, and losses arising out of (i) NAE's use of the Submission; (ii) the entrant's participation in the competition; (iii) technical failures of any kind including but not limited to problems or delays arising from software or equipment malfunctions or computer viruses; and (iv) any events outside NAE's reasonable control.

By entering this competition, each individual entrant, (and for individuals under 18 years old, the individual's parent or guardian) represents and warrants that: (i) the entrant is the sole author, creator, and owner of the Submission; (ii) except for material used by permission, none of the intellectual property rights in the Submission, or any portion

thereof, has been assigned or transferred to anyone other than the entrant; (iii) the Submission, through its creation and its submission as an entry, does not violate any applicable laws; and (iv) the Submission, through its creation and its submission as an entry, does not infringe upon or violate intellectual property rights held by any third person or party.

Any entrant who supplies false information, enters the NAE EngineerGirl Essay Contest by fraudulent means, or is otherwise determined to be in violation of the eligibility criteria or terms of EngineerGirl Essay Contest shall be ineligible for any prize and shall be required to forfeit any prize obtained based on such information or means.

By entering a Submission in the Contest, each individual entrant (and for individuals under 18 years old, the individual's parent or guardian) agrees to comply with and be bound by the official rules and decisions of NAE.

All references to NAE contained herein refer to the National Academy of Sciences on behalf of the National Academy of Engineering.

Winners will be notified in writing via email by June 1, 2017. A list of contest winners may be obtained by submitting a request in writing to: EngineerGirl Essay Contest, National Academy of Engineering, 500 Fifth Street, NW, Washington, DC 20001.

This Contest is void where prohibited. The Contest shall be governed by, construed and enforced in accordance with the laws of the District of Columbia.