NASA TechRise

PROPOSAL TEMPLATE & GUIDE



Your team's entry must be a proposal submitted as a PDF (max 20 MB). Please review the template and guide below to develop your proposal. DO NOT include school names, first & last names, photos of people, or other identifiable information in your proposal. Mentioning names of significant figures (i.e., an astronaut) is OK if it helps explain your entry. All other names will be redacted. Once written, the team lead (teacher or school employee) can submit the proposal on the challenge website. Per the NASA TechRise Challenge Rules, your team's proposal must be an original creation that has not been previously submitted for or selected as a winner in a promotion or competition of any time. Team leads can submit an unlimited number of proposals. All entries will be judged using the following criteria:

- 20 Points: Originality of the flight experiment
- 20 Points: Clarity of the experiment design plan
- 30 Points: Experiment's impact on Education and/or Society
- 30 Points: Feasibility to build the experiment in approximately 4 months with a \$1,500 budget
- 10 Point bonus awarded if school is Title I eligible

PROPOSAL TEMPLATE

To develop your NASA TechRise proposal, please use one of the following templates and follow the guide below.

- Download the fillable PDF template HERE
- Download the MSWord template <u>HERE</u>
- Download the Google Docs template <u>HERE</u>

PROPOSAL GUIDE

Proposal Narrative: Pages 1-3

The proposal narrative should be written by STUDENTS. Any font type is acceptable, so long as the proposal does not exceed 3 pages if formatted using 11-point Times New Roman font, single-spaced, with 1-inch margins. The proposal narrative must include an experiment name and the three sections below. DO NOT include hyperlinks to additional proposal information, files, or websites you have developed. This is beyond the 3-page limit. All links will be removed prior to judging. Citations, however, are acceptable.

Experiment Name

Please provide a name for your proposed experiment.

PROPOSAL GUIDE CONTINUES ON PAGE 2

^{**}Note - You are welcome to recreate the template so long as your proposal includes the required sections.**

PROPOSAL TEMPLATE & GUIDE



Section 1: WHAT is your team's experiment idea?

**Note: Check out the NASA TechRise <u>Rocket-Powered Lander Brainstorming Slide Deck</u> OR <u>Balloon Brainstorming</u> Slide Deck for Inspiration.

Introduce your experiment idea. This section may include:

- the scientific question or inquiry you want to answer or what invention you are proposing to build and test to see if it works. (Or both!)
- what you plan to measure, monitor, or evaluate during the flight.
- the background research you have done.
- your hypothesis.

Section 2: HOW do you imagine your experiment would work? What components and or technologies might you need to make it run?

***Note: Check out the NASA TechRise Plan Your Experiment Slide Decks (<u>Lander</u> / <u>Balloon</u>) and the Explore Components Design Worksheets (<u>Lander</u> / <u>Balloon</u>) for inspiration. It's recommended to include diagrams/sketches to describe your idea.

Describe how you imagine your experiment would work. This section may include:

- how you would design your experiment to operate during flight and achieve your goals.
- how you would capture and analyze the results of your experiment to understand whether it worked and determine what you were able to learn.
- the components you could use to build your experiment.
- how your components will fit into your 4 x 4 x 8 in. flight box.

Section 3: WHY do you want to propose this experiment idea?

Explain your team's motivation behind proposing this experiment idea. Reasons may be related to:

- the impact building and testing this experiment would have on your school or team.
- the new knowledge or skills your team would gain by doing this project.
- building public awareness around a particular subject.
- the impact this experiment would have on space exploration, your knowledge of our planet, or on society as a whole.

Once complete, the Team Lead (Teacher or School Employee) can submit the final proposal at:

https://www.futureengineers.org/NASATechRise

^{**} All winning teams will work with our awesome TechRise advisors to finalize their design and learn (or refine) the engineering skills needed to build their experiment. The education resources on the challenge site help teams explore possible components and are a great resource for this section. **