*****DEADLINE EXTENDED to February 9, 2025 at 11:59 PM EST*****

The Challenge:

When you gaze into the night sky, the Earth's brilliant Moon often captures your attention. We are going back to the Moon to stay. However, with freezing temperatures, long lunar nights, and deep craters of the Moon that never see sunlight, we could use a special kind of power; **Radioisotope Power Systems (RPS)**. For over 60 years, NASA has been using RPS, a type of nuclear "battery," to power spacecraft and enable them to travel to some of the harshest, darkest, coldest, and farthest reaches of our solar system. Did you know that our solar system boasts nearly 300 moons, many of which remain mysteries to us? These moons provide an incredible opportunity for discovery. RPS has powered missions near Jupiter's moon Io, where over 400 active volcanoes were revealed; Saturn's dusty moon Titan, where it helped uncover its methane lakes, oceans, and rivers; and Pluto's moon Charon, where NASA recently discovered jagged mountains and deep canyons.

If you could plan an RPS-powered mission to any moon in our solar system, which moon would you choose to unravel its mysteries?

K-12 students, your task is to plan a mission that uses **Radioisotope Power Systems (RPS)** to a dark, dusty, or far away moon in our solar system. NASA wants to know what you plan to explore, the discoveries you hope to make, and what your special power is to help you achieve mission success.

Your entry should address the topics below:

- **Dark, dusty, or distant mission destination:** Tell us to which moon your RPS-powered space mission will go and describe your mission goal(s). Keep in mind that your mission can either fly-by, orbit, land, or rove.
- **Radioisotope Power Systems (RPS):** Explain the importance and advantages of using RPS for this mission. How does this technology overcome the limitations of solar power in environments with limited light? How does this technology overcome the challenges of these extreme environments and destinations?
- **Your power:** NASA missions are also powered by people– from mission planning and development, to designing, launching, and operating a spacecraft. Tell us what you think your unique power is and how your special power will help you achieve mission success. Your power could be a skill, personality trait, or other personal strength that is uniquely you.

Entries will be judged in three grade-level categories: K-4, 5-8, and 9-12. In total, your submission is limited to 275 words. You must also include a title, which will not be included in the word limit.

Every student who submits an entry will receive a digital certificate and an invitation to a virtual event with NASA RPS experts, where students will learn about what powers the NASA workforce to dream big and explore. Fifteen national semifinalists in each grade category (45 semifinalists total) will receive a NASA RPS Prize Pack. Three national finalists in each grade category (9 finalists total) will receive an exclusive virtual session with a NASA RPS expert. One grand prize winner from each grade category (3 grand prize winners in total) will receive a trip for two to **NASA's Glenn Research Center** in Cleveland, to learn about the people and technologies that power NASA missions.

The Challenge Continued

Check out the EDUCATION RESOURCES to learn more about RPS, its use on NASA missions, the moons of our solar system, and ideas to help brainstorm your unique powers. Please do not include your name or any family/friend names in your entry! For all entry requirements, please read the RULES. Get writing, and good luck!

Your participation in this Challenge is governed not only by these Challenge Rules BUT ALSO by the GENERAL RULES, which are incorporated.

Who Can Enter

Legal residents of the United States who are registered students in grades kindergarten through twelfth grade (K-12) attending a public, private, or home school in the United States (including U.S. Territories and Possessions and schools operated by the U.S. for the children of American personnel overseas) are eligible to enter (eligible "Participants"). Employees of Future Engineers ("Sponsor"), National Aeronautics and Space Administration ("NASA") and the immediate family members (spouse, parent, child, sibling, partners, and their respective spouses, and foster and step-relations) regardless of where they reside, or those living in the employee's same household (whether or not related) are not eligible to enter or win a prize. Sponsor and NASA collectively referred to herein as the "Challenge Parties".

Privacy Rules

Submissions will be reviewed for eligibility, compliance, privacy, and student safety prior to being displayed in the gallery. Entries that moderators find not to be compliant, for example, that contain personal information may (but without obligation) be flagged for resubmission (or rejected, for example, if submitted after the deadline).

- NO NAMES OF PEOPLE! Do not write your full name or anyone else's full name in your entry. Factually referencing significant figures (e.g., a historical or present-day scientist, engineer, or astronaut) in your entry is OK.
- NO SCHOOL NAMES! Do not submit your school name in your submission.
- NO CONTACT INFO! Do not submit an address, email address, phone number, or any combination of information that could be used to identify, locate or contact a student.
- NO USERNAMES! Do not submit a username from any site or platform.

Submission Criteria

Submissions that violate the Rules will be ineligible to win and may be flagged for resubmission.

- Your Submission Must Include:
  - Title of your entry
    - Maximum 75 characters (which will not be included in the word count maximum)
  - A TYPE-WRITTEN Essay
    - Maximum 275 words ("entry")
- ONE eligible entry per student. Team entries are NOT allowed. You may edit your submitted entry, but your last version of the submitted entry before the deadline will be judged.
- Keep it G-rated! No inappropriate content (as determined by Sponsor in its sole discretion).
- Your entry must be original and 100% created by YOU. Adults may assist younger students with typing the online submission, but the entry must be the **student's** own creative, original work.
- Your entry must not use, copy, incorporate or otherwise plagiarize from any third-party source, this includes without limitation any material created in whole or in part by artificial intelligence.
- Your entry must not contain URLs that link to external sites, files, or videos such as Google Docs or YouTube. Citing general sources such as "NASA" or "Space.com" is OK if it is intended to identify a source, not provide additional content.
- Do not include content that infringes on the rights of others. Referencing common trade names **factually** in your description is OK.

Judging Criteria

The Judges will score eligible entries based on the following Judging Criteria (max score of 100 points) (observing the age of the entrant group):

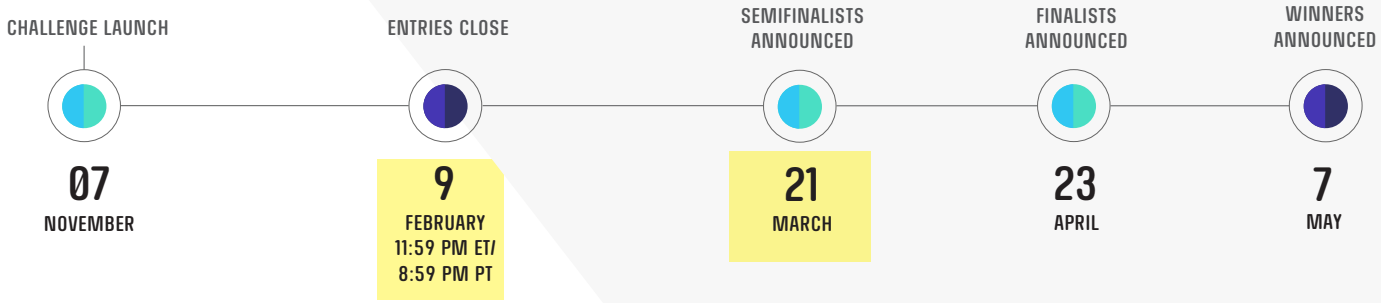
25 POINTS	feasibility of where your RPS-powered space mission will go and your mission goal/s
25 POINTS	creativity of your selected moon destination
25 POINTS	how well your special human power will help achieve your mission goal/s
25 POINTS	quality of the written entry

Tie Break

In the event of a tie at any stage of judging, the tie will be broken amongst all tied entries by the highest score in the 'feasibility of where your RPS-powered spacecraft will go and your mission goal/s' category. In the event a tie still exists, the tie will be broken amongst all tied entries by the 'creativity of your selected moon destination' category.

Program Dates

All entries must be received by: February 9, 2025, 11:59 p.m. Eastern Time (8:59 p.m. Pacific Time). Parent consent must be received by the time requested, otherwise entry will be disqualified, and the entrant will be ineligible to win. It is anticipated that Challenge dates/deadlines will be on or about as follows; however, all dates may be subject to change due to necessity of the circumstances, as determined by Sponsor in its sole and absolute discretion:



Prizes

There are three grade categories K-4, 5-8, and 9-12 (each a "Grade Category"). Students will compete in their applicable Grade Category and eligible entries in each Grade Category will be judged accordingly. As determined by the highest scores received, based on the Judging Criteria described above, there will be selected from each Grade Category: fifteen (15) national semifinalists ("Semifinalists"); three (3) national finalists ("Finalists"); and one (1) national Grand Prize winner. The following prizes are available to be awarded, subject to eligibility and compliance, as determined by Sponsor and NASA in their absolute discretion:

- **Semifinalist Prize (15 per Grade Category / 45 total):**
  A NASA RPS Prize pack. Prize pack anticipated but not guaranteed to consist of: pins, stickers, and printed materials (Approximate Retail Value (ARV): $10 each).
- **Finalist Prize (3 per Grade Category / 9 total):**
  A 30-minute group virtual session for the Finalists in each grade group with a NASA expert (promotional value only). Prize also includes a Finalist prize pack anticipated but not guaranteed to consist of: space-themed apparel and novelty goods (ARV: up to $100 each).
- **Grand Prize (1 per Grade Category / 3 total):**
  A 4-day/3-night trip for Grand Prize winner and one (1) parent/legal guardian ("guest" who must be 21 years of age or older) to NASA Glenn Research Center, Cleveland, Ohio. Trip consists of: roundtrip air transportation for two people to/from a major gateway airport near winner's legal U.S. residence and Cleveland, Ohio; 3-nights hotel accommodations (standard room, double occupancy, room rate and tax included); ground transportation to/from airport to hotel, and to/from NASA Glenn and hotel (ARV of Trip: up to a max value of USD$3,000).

Prizes Continued

Grand Prize (1 per Grade Category / 3 total) Continued:

Sponsor will also provide up to a maximum amount of USD$900 as part of the Grand Prize (in the form of a check, which may be used to offset taxes; however, the offset amount will be determined by Sponsor based on actual value of prize awarded). (ARV of Grand Prize: up to USD$3,900).

Further specifics and limitations with respect to the grand prize trip are provided in the GENERAL RULES and will also be provided in applicable winner release documentation. Blackout dates and restrictions apply. Actual value depends on winner's residence and other factors; any difference between actual and approximate value will not be awarded as cash or otherwise and Sponsor reserves the absolute right to limit particular elements of a prize. Prizes are subject to coordination with NASA and any additional limitations and/or restrictions imposed by NASA as may be communicated in the winner release documents.

General Prize Terms: Limit one (1) prize at each prize level (semi, finalist, grand) per person.

Prize must be accepted as a whole or will be forfeited in its entirety. Any and all applicable local, state, and federal taxes and all expenses not specifically stated herein are solely the responsibility of a winner (or if a minor their parent or legal guardian). Without limitation, Sponsor reserves the unfettered right NOT to award any prize, in whole or in part, if doing so may result in public disrepute, scandal, or may have a detrimental impact on Sponsor, NASA, this Promotion, or any of Sponsor's or NASA's public image, brand, products or services (as solely determined by Sponsor in its absolute discretion). Any Entrant suspected (in Sponsor's discretion) of cheating, fraud, or artifice to participate in the Promotion or any element thereof, or is threatening, abusive, unsportsmanlike, rude or obnoxious (in Sponsor's sole determination), or is suspected of being ineligible or noncompliant will be disqualified immediately and will forfeit the opportunity to enter or receive a prize. Only the prize as described is available to be awarded; in no event will Promotion Entities be responsible for awarding more or different prizes than stated herein. The Challenge Parties are not responsible if any event or activity associated with any prize is delayed, postponed, or canceled for any reason. Winner will not receive compensation from any of the Challenge Parties for any aspect of a prize that the winner is unable to use due to force majeure (including but not limited to the pandemic and effects therefrom) theft, misplacement, loss, damage, destruction (and such will not be replaced), or to delay or cancellation of an event or activity (but certain tickets may be subject to standard rain-check policies and procedures set by the issuer). Prizes cannot be assigned, transferred, or substituted, except by Sponsor who may, at its sole discretion, substitute a prize or any part thereof with a prize of equal or greater value.

Future Engineers reserves the right, without obligation, to (i) select fewer winners (if there are not enough eligible entries received) or (ii) to award additional prizes or (iii) not award a prize or to disqualify any Participant/entry at any time (and require immediate prize return, if applicable) if it determines or suspects that Participant/entry is ineligible, incomplete, non-compliant, or that awarding the prize to any such Participant might bring the Sponsor or any other of the Challenge Parties into public disrepute, scandal or contempt. If a winner is disqualified for any reason, Future Engineers or NASA may award the subject prize to an alternate even if the disqualified Participant has already been announced.

Ownership and Licensing:

Entries may be displayed in a moderated public gallery. Please refer to the GENERAL RULES and TERMS OF SERVICE for details. Depiction in the gallery shall not be deemed a representation of an entries' ranking, score, or eligibility for the Challenge.

Potential Winner Notification

The potential winners' parents or legal guardians will be notified via email, and they will be required to sign and return additional documents by a specified time, which may include:

Affidavit (or Declaration, as determined by Sponsor) of Eligibility, Liability and, where legal, a Publicity Release, and any additional releases required by NASA and/or any third party prize fulfillment entities. Guest of Grand prize winner will also be required to sign a Release of Liability and Publicity Release.

If any prize, prize notification, email, or other communication is returned as undeliverable, or if a potential winner (at any level) cannot be reached after one (1) attempt by email or phone, refuses the prize, fails to (timely) respond, or fails to properly sign and return all releases within the time period requested, or if a potential winner or their entry is found to be ineligible, the potential winner may be disqualified. The next highest scoring entry (for the applicable prize within that Grade Category) may be notified, time permitting. If an alternate winner cannot be notified or fails to respond that prize will be forfeited and may not be awarded due to time or other constraints prior to the trip.

Sponsor and Challenge Parties:

Sponsor: Future Engineers LLC
177 E Colorado Blvd.,
Suite 200 Pasadena, CA 91150

Challenge Parties: NASA
300 E Street SW
Washington DC 20024

GOOD LUCK!