Join the Inventerprise crew on a journey into the depths of your imagination

Your 2025 mission is:



We are the Martians

Imagine if we actually made it to Mars. How would we have to adapt our lifestyle to live in this new environment? Invent something that prepares us for this future.



Here's some ideas to help you get started, but don't let them limit your creativity!

Without a strong atmosphere, Mars will be an extreme place to live. What will our shelters look like to protect ourselves from the Sun's powerful rays and extreme wind storms? Do we live below ground...?

Getting to Mars is one challenge. How about getting around Mars?

Basketball in low gravity? Is swimming even an option? What will we do for fun on Mars?

We're going to need to eat...

Will we harvest water from Mars, or bring water from Earth? Is there any way we can make water on Mars? How do we store and distribute it?

Brr, it's cold up here! Maybe you will be the one that solves this hurdle.

Space toilets? Design a system to manage human waste on Mars.

What are the communication systems will be needed to stay connected with our friends back on Earth? How do we even sync our calendars?

Litter, pollution, traffic congestion... How will you prevent us making the same mistakes we did on Earth?

Take the dog for a spacewalk. How will our pets survive here?



Design a functional yet stylish spacesuit.

How will we stay healthy on Mars? Invent something that allows us to deal with limited medical resources.

Still needing a bit of a starting point? Check out these articles explaining what scientists are currently studying:

NASA technologies

MOXIE

HI-SEAS studies

Inventerprise is an annual problem-solving contest open to all central Oregon K-12 students. The best entries are not only inventive and feasible, but an idea that is well developed and includes context such as why you chose this topic, how the idea came to you, how you developed it, why your invention is important, and any research you may have done.

Sponsored by: LONZQ

Contest Rules

- Any Central Oregon student (Deschutes, Jefferson, and Crook counties) in grades K-12 may enter. Students may enter as individuals or in groups, but each student can only submit one entry:
 - <u>Elementary students (K-5)</u> may enter as individuals or as a team of up to 3. Students submitting a
 group project must be in the same grade, as each grade level will be judged separately.
 - Middle school (grades 6-8) students may enter as individuals or as a team of up to 3. Students submitting a team project can be in different grades, as middle school is judged as a single category.
 - High school (grades 9-12) students may enter as individuals or as a team of 2. Students submitting a team project can be in different grades, as high school is judged as a single category.
- Entries must be submitted through the contest website:
 inventerprise.mailchimpsites.com
- Submissions are accepted from Oct. 1, 2024 through Jan. 8, 2025
- Entries must be submitted in English.
- Entries should be original. No AI generated content is allowed.



- Just because entries are digital, doesn't mean you have to use a digital format.
 Get your hands dirty: make and create! Use whatever format(s) works best to convey your ideas
 - Video entries should be no more than 3 minutes in length
 - Up to 6 files may be uploaded. Accepted file types are pdf, image, and video files.
- Parents and teachers may be consulted, but don't let grown-ups do your work or talk you out of your great ideas!
- A panel of scientists, engineers, and educators will judge entries based on
 - Feasibility
 - How well the idea is developed and presented
 - Creativity and Originality

Prizes and Incentives

- Winners will be announced no later than January 20, 2025. Names and schools will be published publicly unless we are given prior notice via email to inventerprise@lonza.com to keep this information private.
- All entrants will receive recognition of their efforts.
- T-shirts will be awarded to all winners from each category along with an invitation to attend the winners' event in March. Additional prizes include
 - Middle School:
 - Honorable mentions will receive a \$25 Barnes & Noble gift card
 - Runner-up winner(s) will receive their choice of either a \$250 Barnes & Noble gift card, Apple AirPods Pro, or Bose SoundLink Flex Bluetooth speaker
 - Grand Prize winner(s) will get their choice between the above or a GoPro® camera, Apple or Fitbit watch, 3D printer, Bose headphones, inflatable paddle board
 - o High School: Up to \$2,000 will be split among students submitting the best high-school entry(ies)
- Teachers of grades K-8 with high classroom participation will receive \$100 Amazon gift certificates as part of the Tina McGeary incentive program.