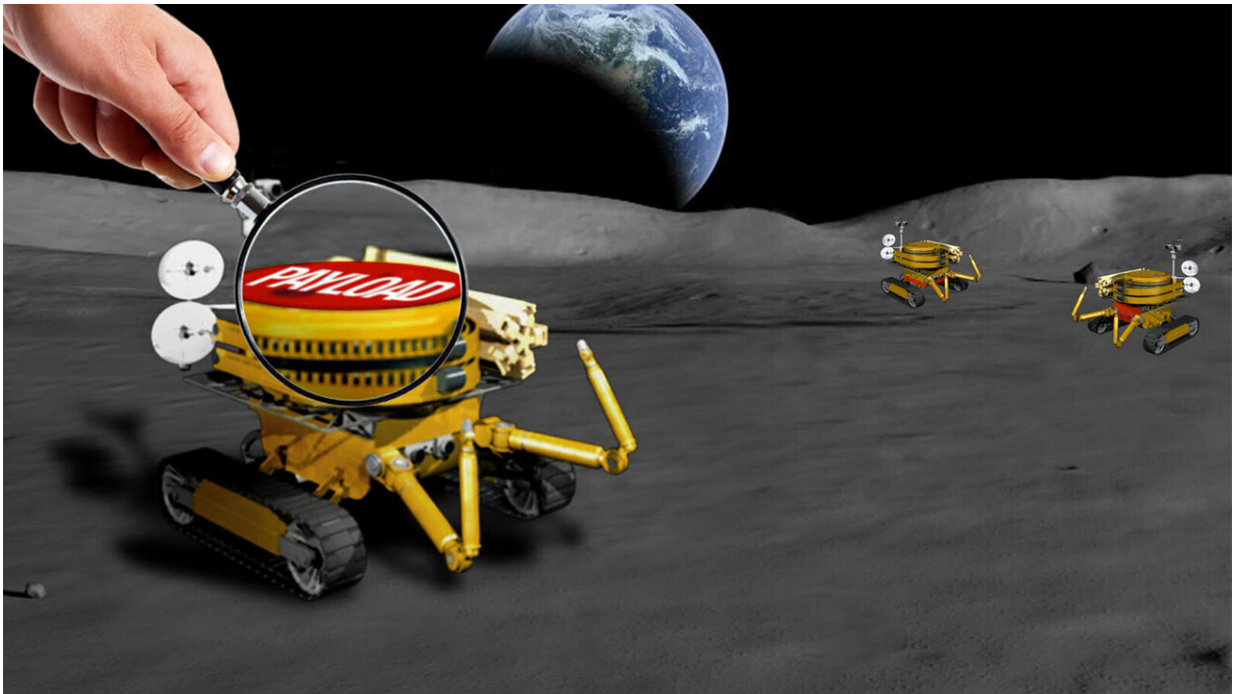


# Help pave the way for Artemis: Send NASA your mini moon payload designs

April 10 2020

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The JPL-led challenge is seeking tiny payloads no larger than a bar of soap for a miniaturized Moon rover. Credit: NASA

Future exploration of the Moon and beyond will require tools of all shapes and sizes—from sweeping orbiters to the tiniest of rovers. In addition to current planned scientific rovers like the Volatiles Investigating Polar Exploration Rover, or [VIPER](#), NASA could one day send even smaller rovers to help scout the Moon's surface. These tiny

robots would provide mission flexibility and collect key information about the lunar surface, its resources and the environment. The data collected by these rovers would be helpful for future lunar endeavors and NASA's [Artemis](#) program.

NASA's Jet Propulsion Laboratory in Southern California is running a public prize competition to design miniaturized payloads for future Moon missions. The "[Honey, I Shrunk the NASA Payload](#)" challenge is seeking instrument designs that could help support a sustained human lunar presence, demonstrate and advance the use of resources found on the Moon, and enable new science.

Existing payloads are often big, heavy and require a lot of power. The payload designs sought for this challenge are required to be similar in size to that of a bar of soap at a maximum of 3.9 inches by 3.9 inches by 1.9 inches (100 millimeters by 100 millimeters by 50 millimeters) and weigh no more than 0.8 pounds (0.4 kilograms).

"Smaller payloads are game changing," said Sabah Bux, a JPL technologist. "They will allow us to develop technologies to do more prospecting and science on smaller, more mobile platforms."

This ideation challenge is expected to be followed by new competitions to prototype, test and deliver the miniaturized payloads. The competition is intended to generate a maturation pipeline of next-generation instruments, sensors, technologies and experiments for near-term lunar exploration.

Participants will have an opportunity to win a share of \$160,000 in prizes across several categories. JPL is working with the NASA Tournament Lab to execute the challenge on the heroX crowdsourcing platform. Submissions will be accepted through June 1, 2020.

**More information:** For more information about the challenge and how to enter, visit: [www.herox.com/NASApayload](http://www.herox.com/NASApayload)

Provided by NASA

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