



# THE EVA AND HUMAN SURFACE MOBILITY PROGRAM (EHP) MISSION

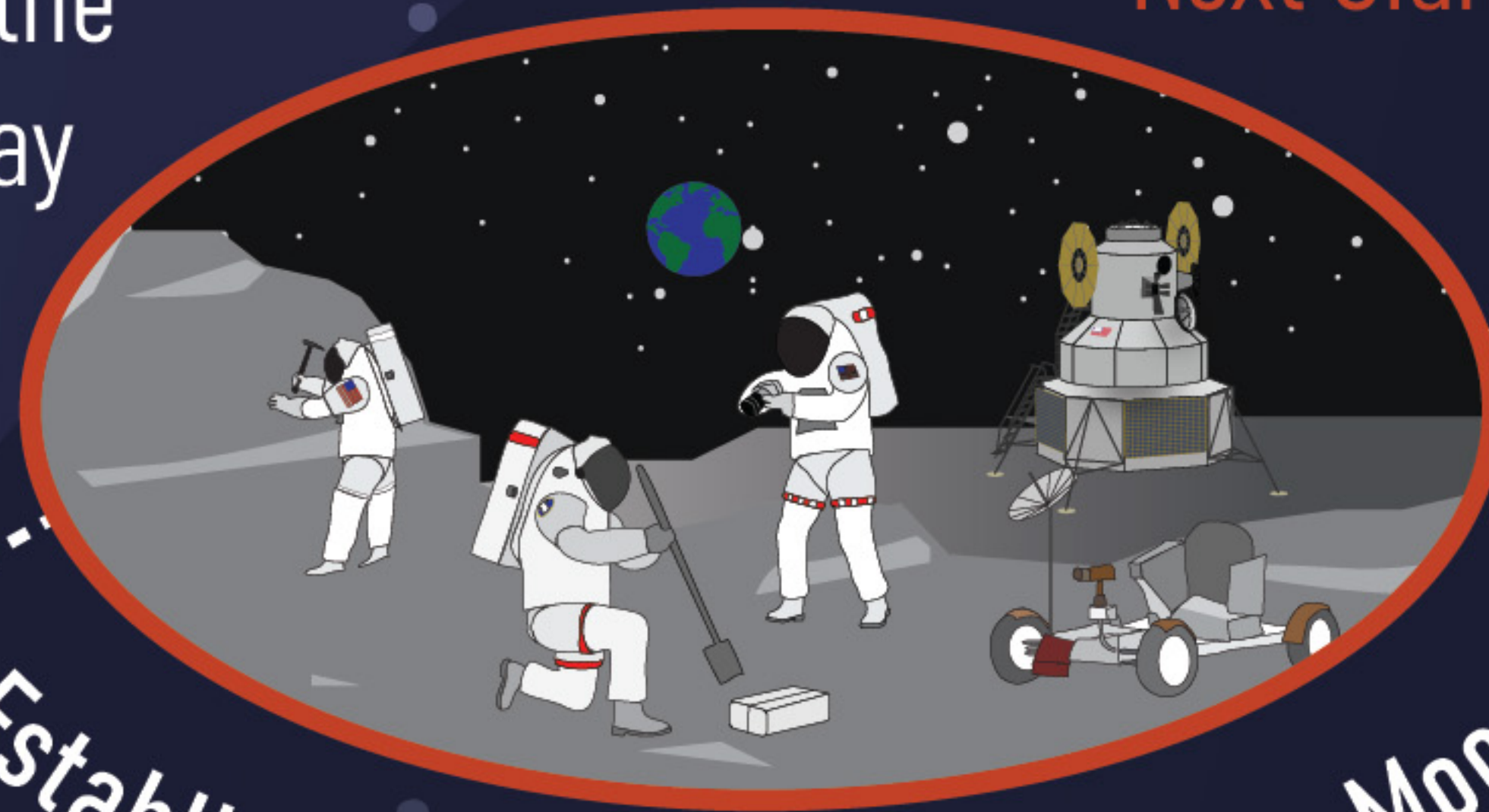


TO EXECUTE SAFE EVAS THROUGHOUT THE LIFE OF THE INTERNATIONAL SPACE STATION AND TO DEVELOP EVA AND SURFACE MOBILITY SYSTEMS FOR ARTEMIS TO PROVIDE CREW EXPLORATION CAPABILITY ON THE MOON

Developing the Future Today

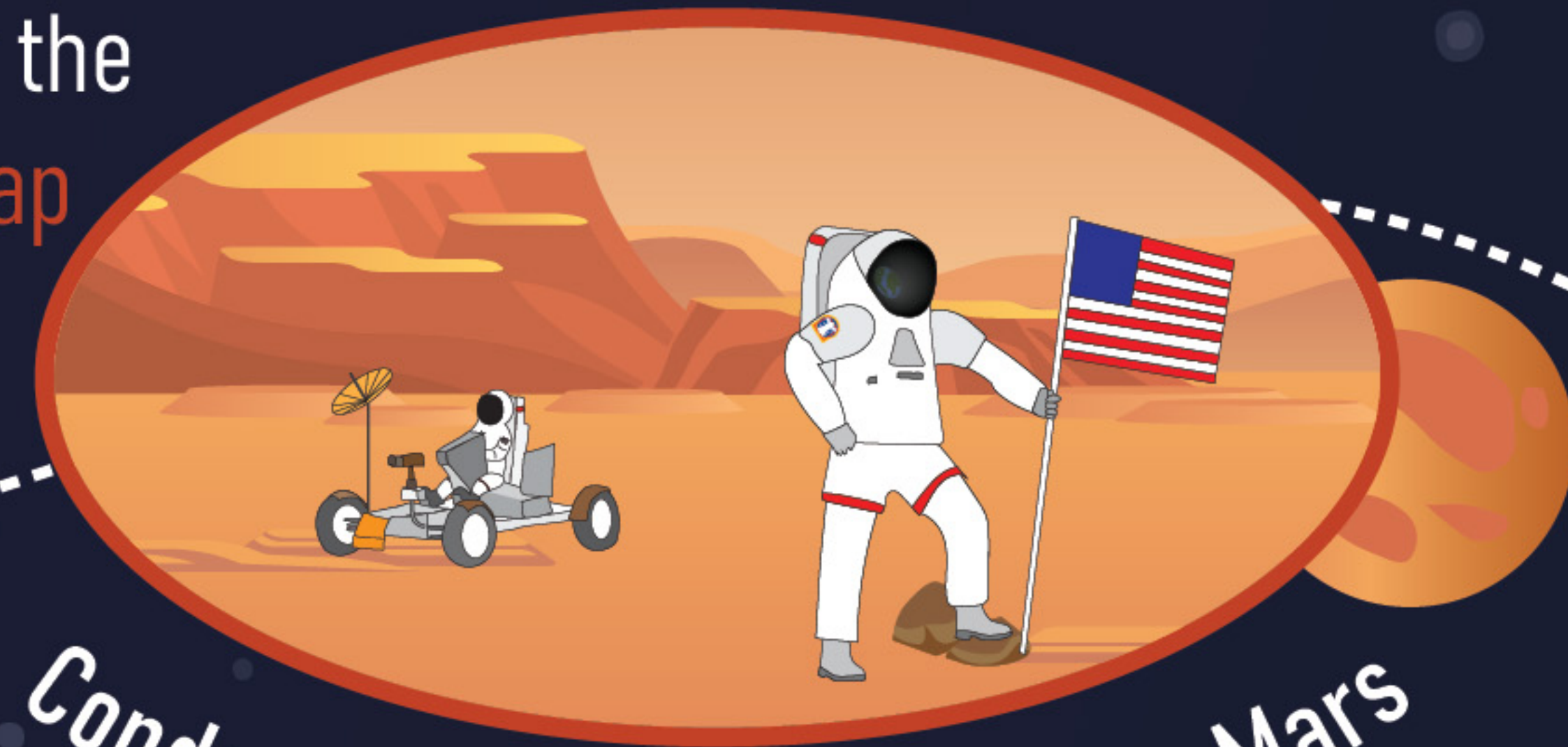


Continue EVA Advancement on ISS



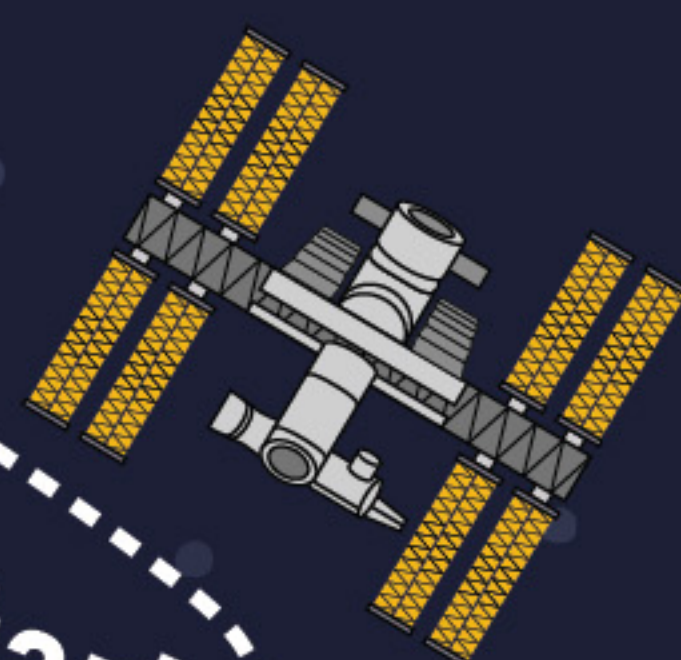
Establish Human Presence on the Moon

Preparation for the Next Giant Leap



Conduct Human Exploration on Mars

Exploration Starts Here



Johnson Space Center  
Houston, Texas

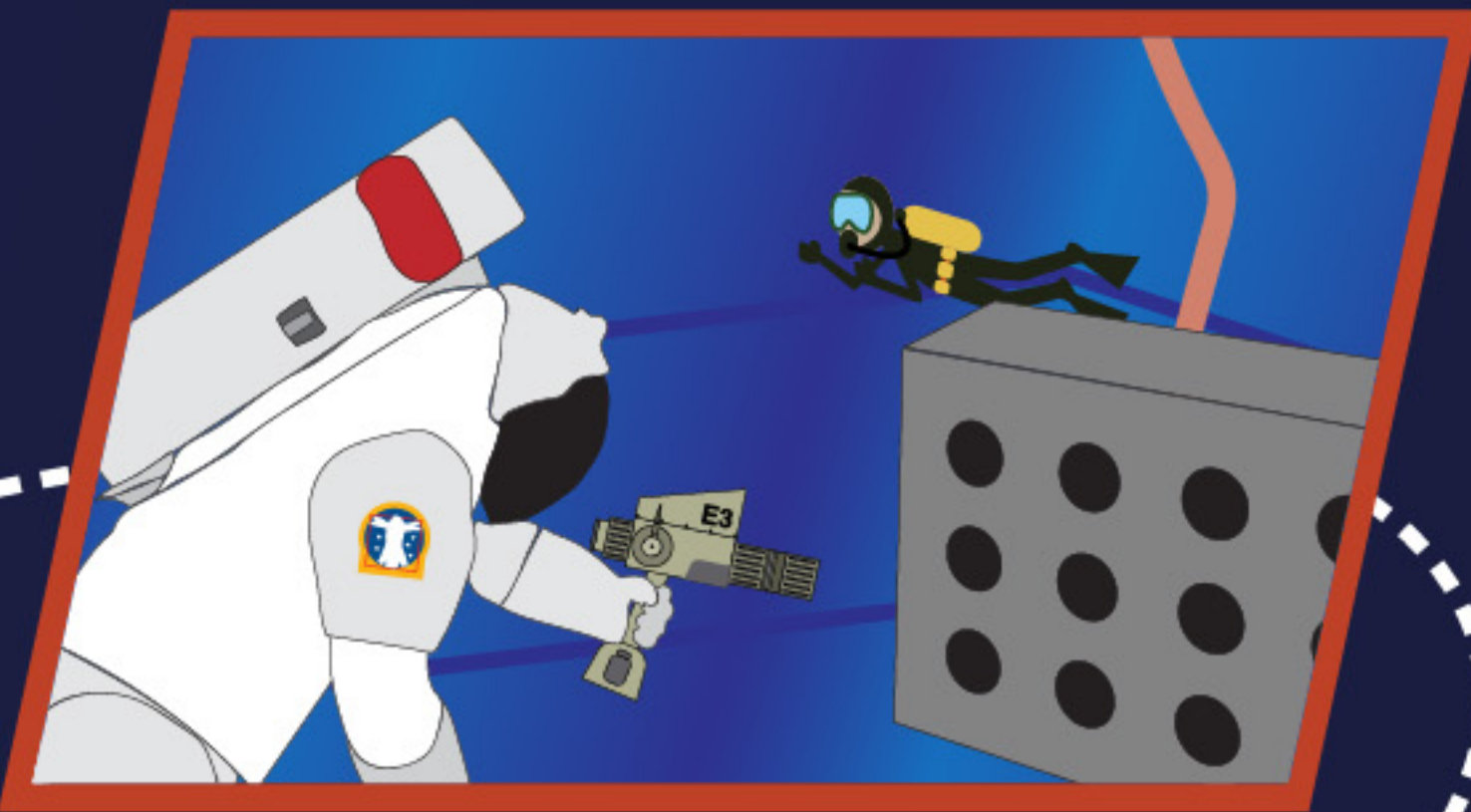


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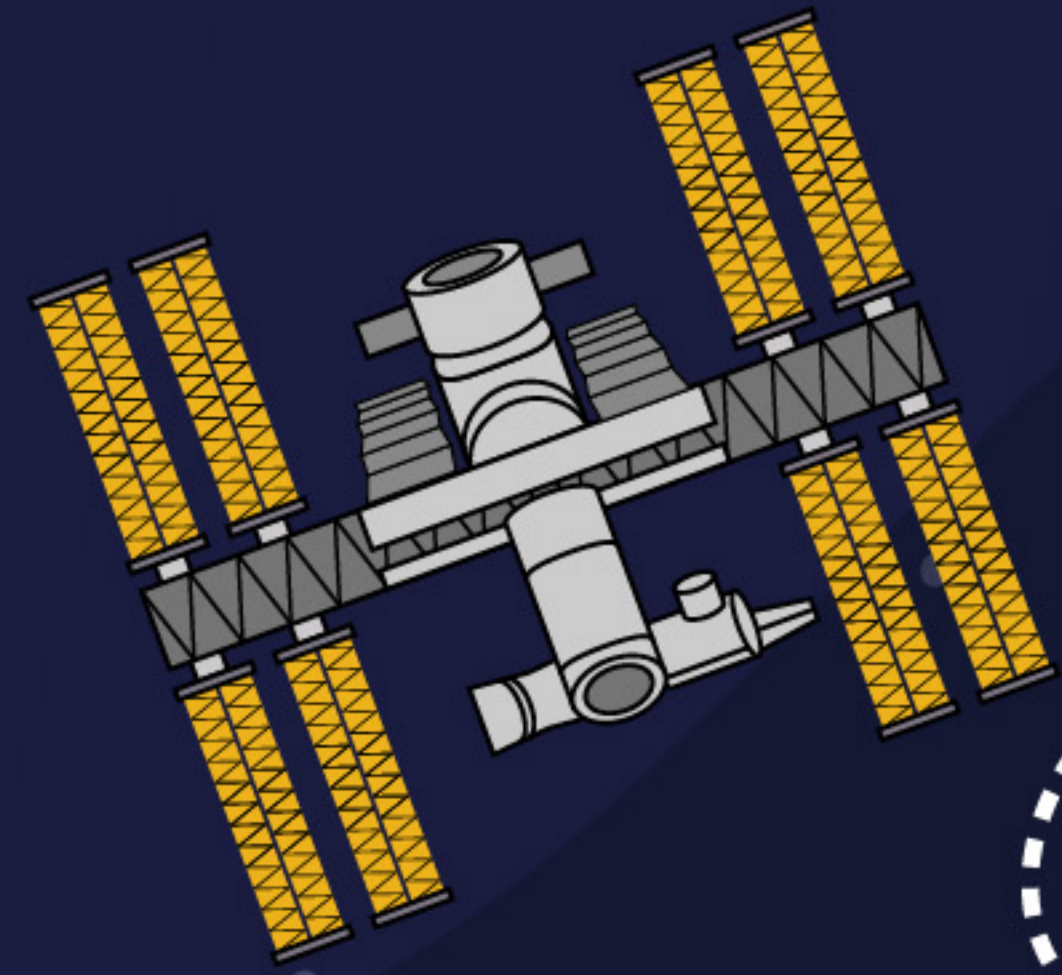


## Mission Objective

1) Continue EVA Advancement on ISS



ISS assembly was completed in 2011 thanks to EVA capabilities designed and tested in the NBL.



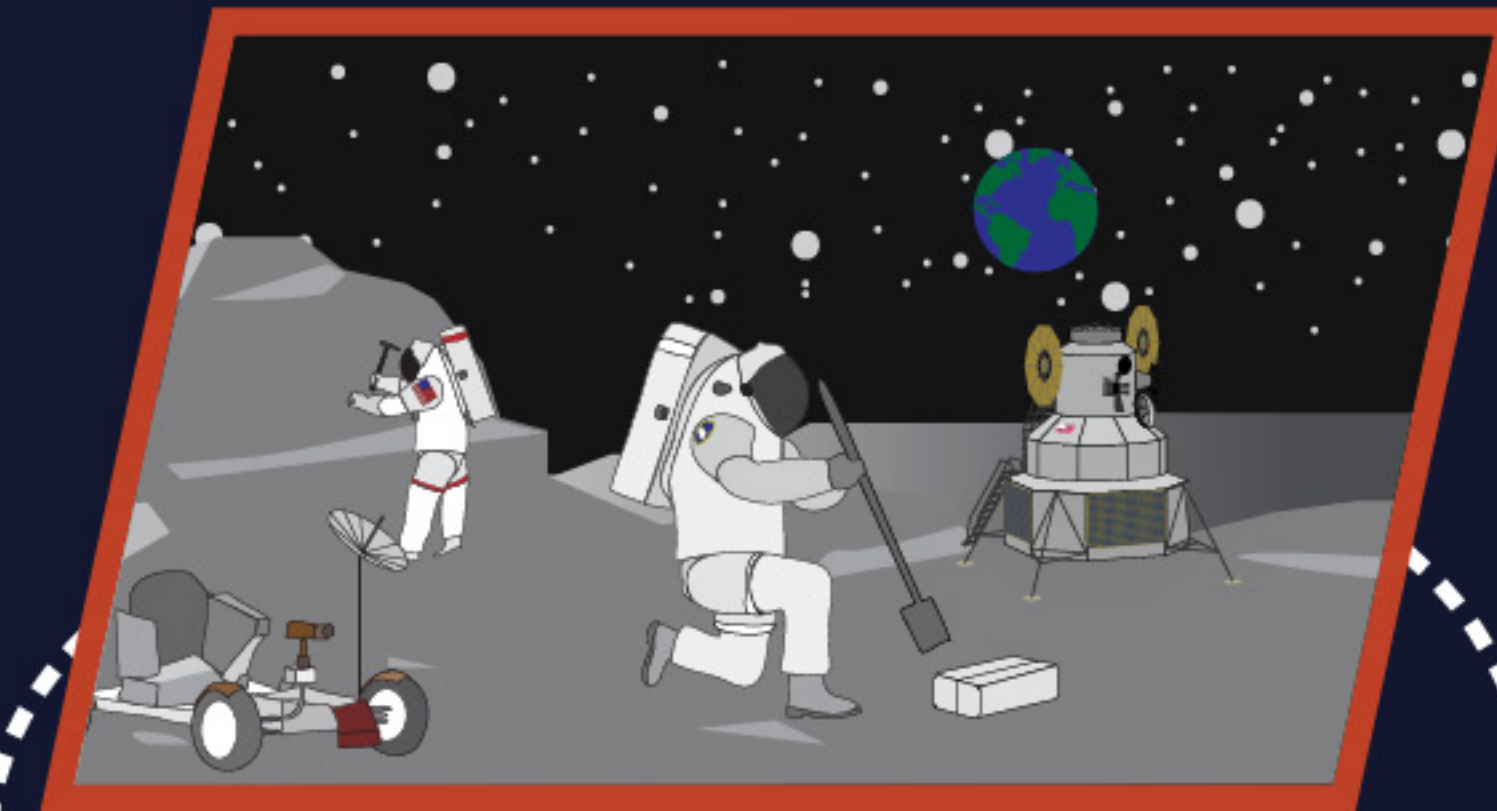
We've completed over **240 EVAs** on ISS, totalling over **1,500 hours** of EVA time.



We will continue to enable **safe and effective EVAs**...



...and will proceed with the testing and development of new **EVA capabilities and technologies**.



We will utilize **exploration technologies** for the Moon.



Past

Present

Future

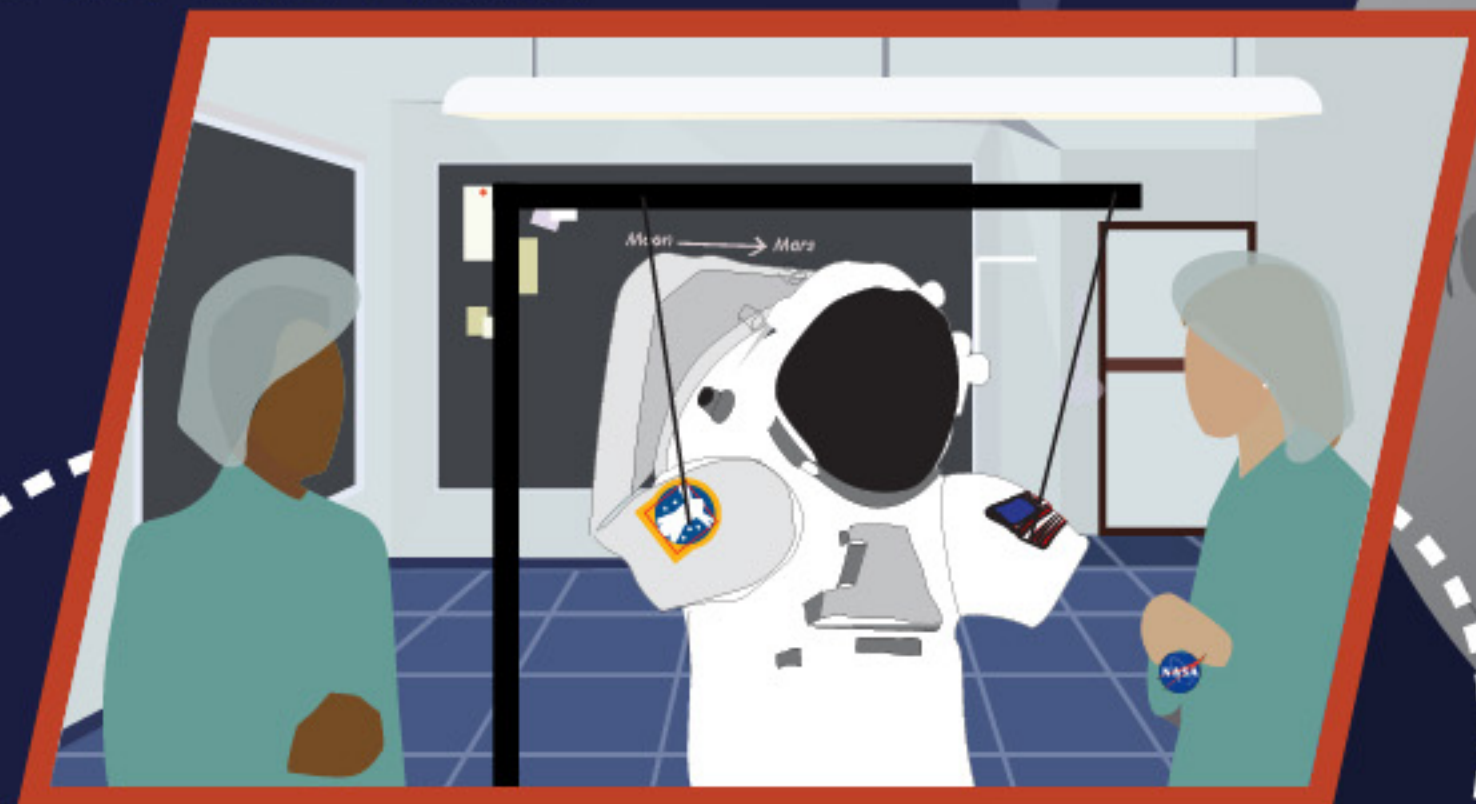


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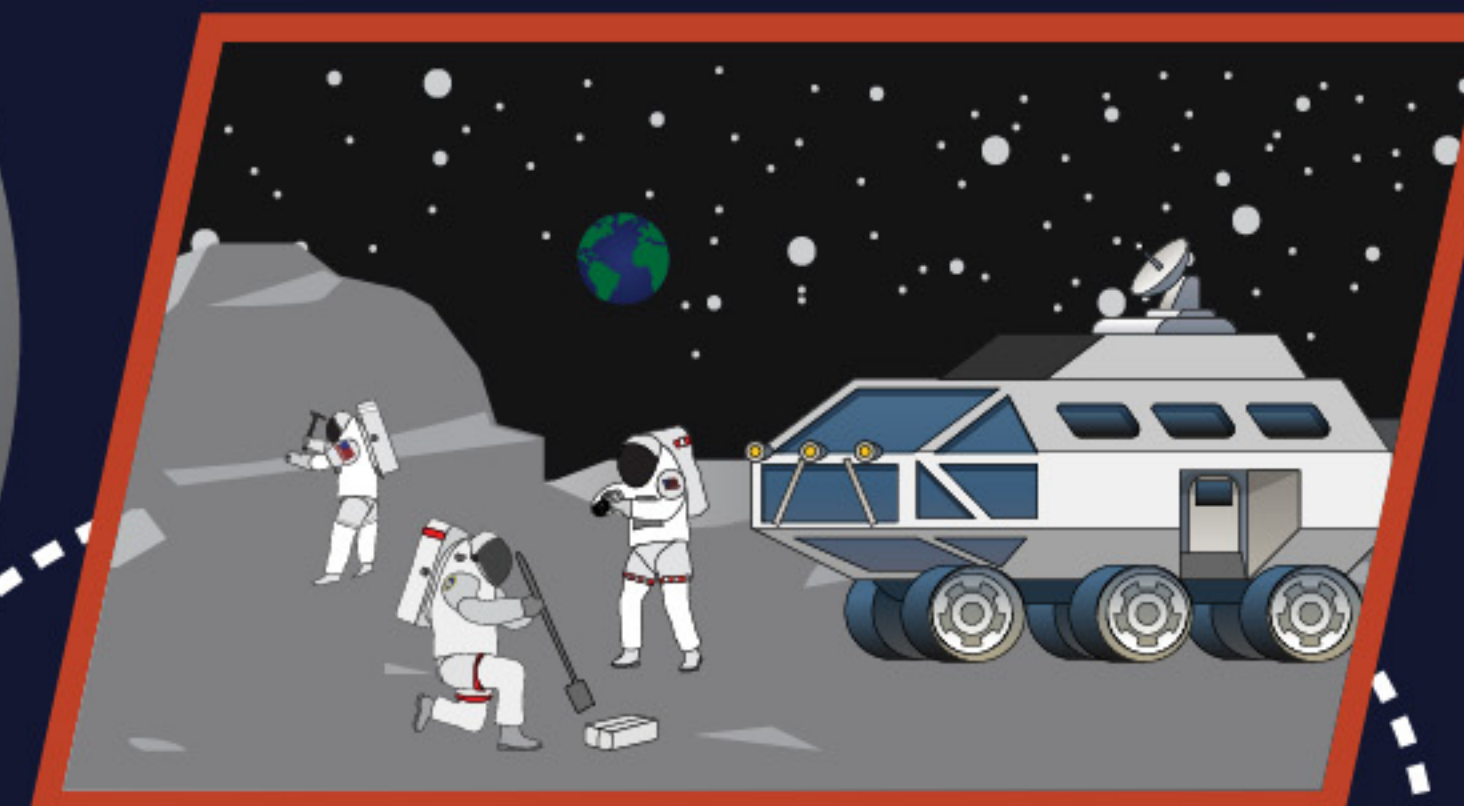


## Mission Objective

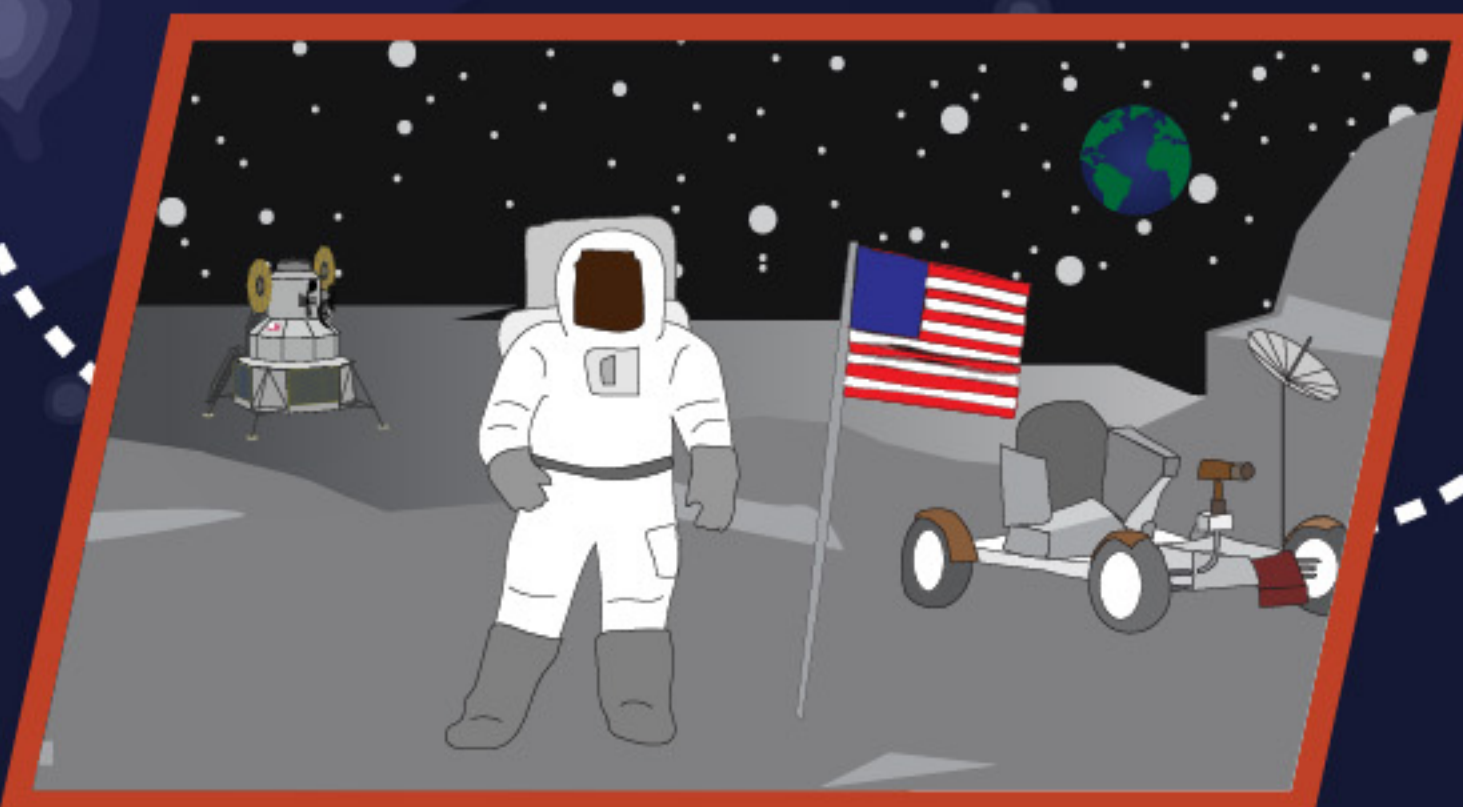
2) Establish Human Presence on the Moon



A prototype spacesuit is in development to support ISS Low Earth Orbit Operations and Artemis missions to the moon and Gateway.

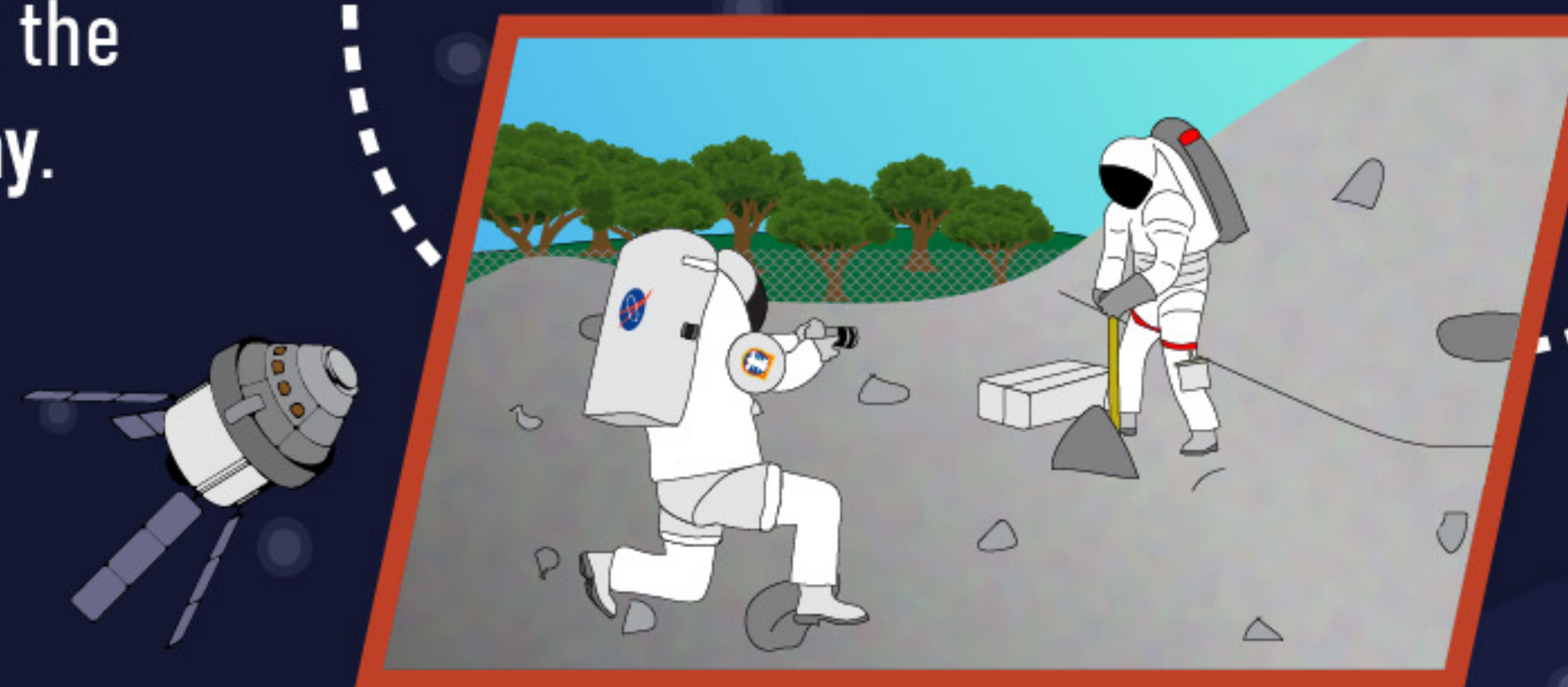


Humans will return to the lunar surface and develop a base camp to support continued exploration.



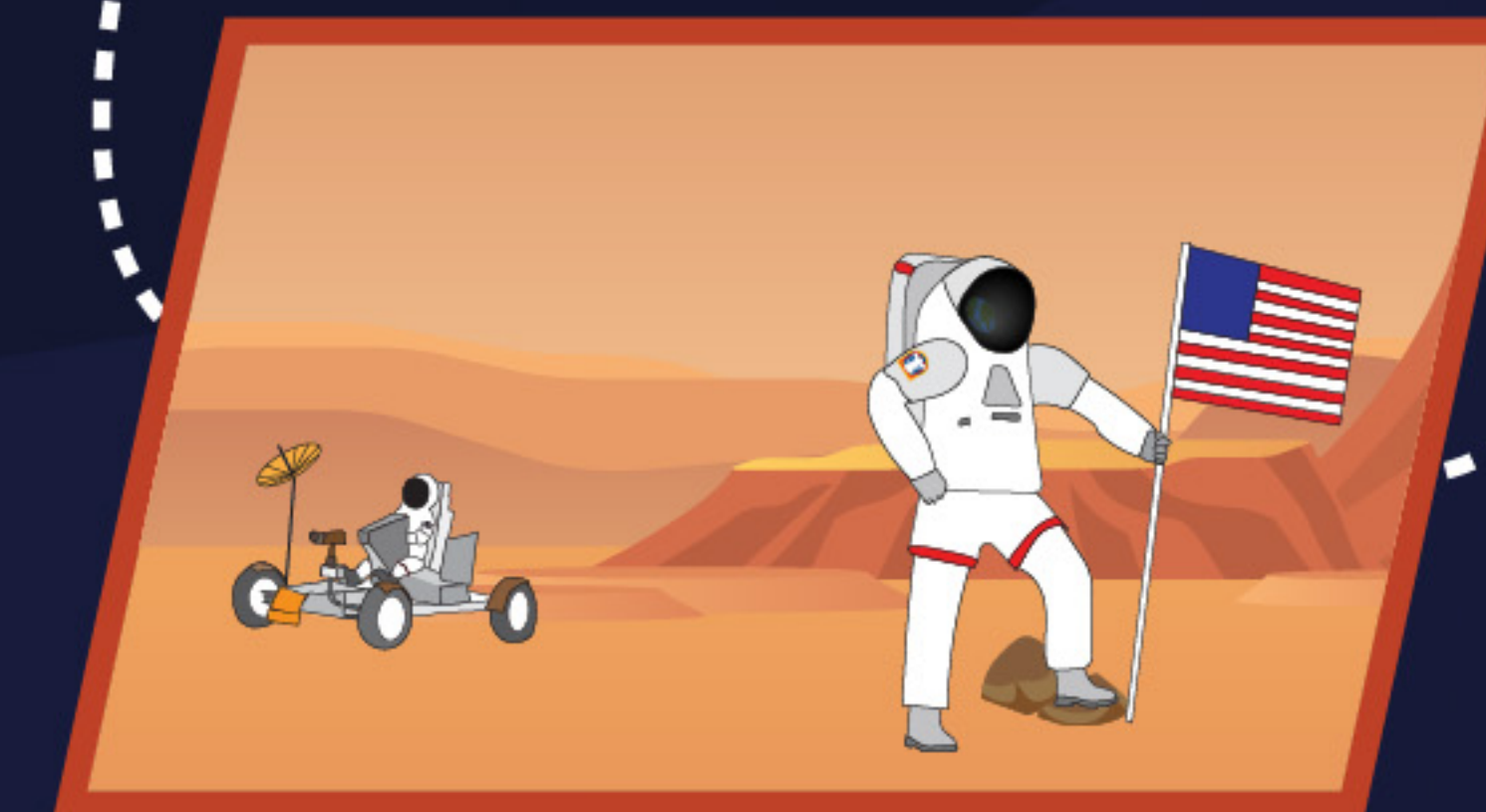
14 lunar surface EVAs were completed during the Apollo Program totaling over 150 hours of EVA time.

Apollo



New lunar geology tools are being developed and tested to support lunar science goals.

Artemis



Lunar Exploration Technologies will enable the next big leap... planetary exploration on Mars!

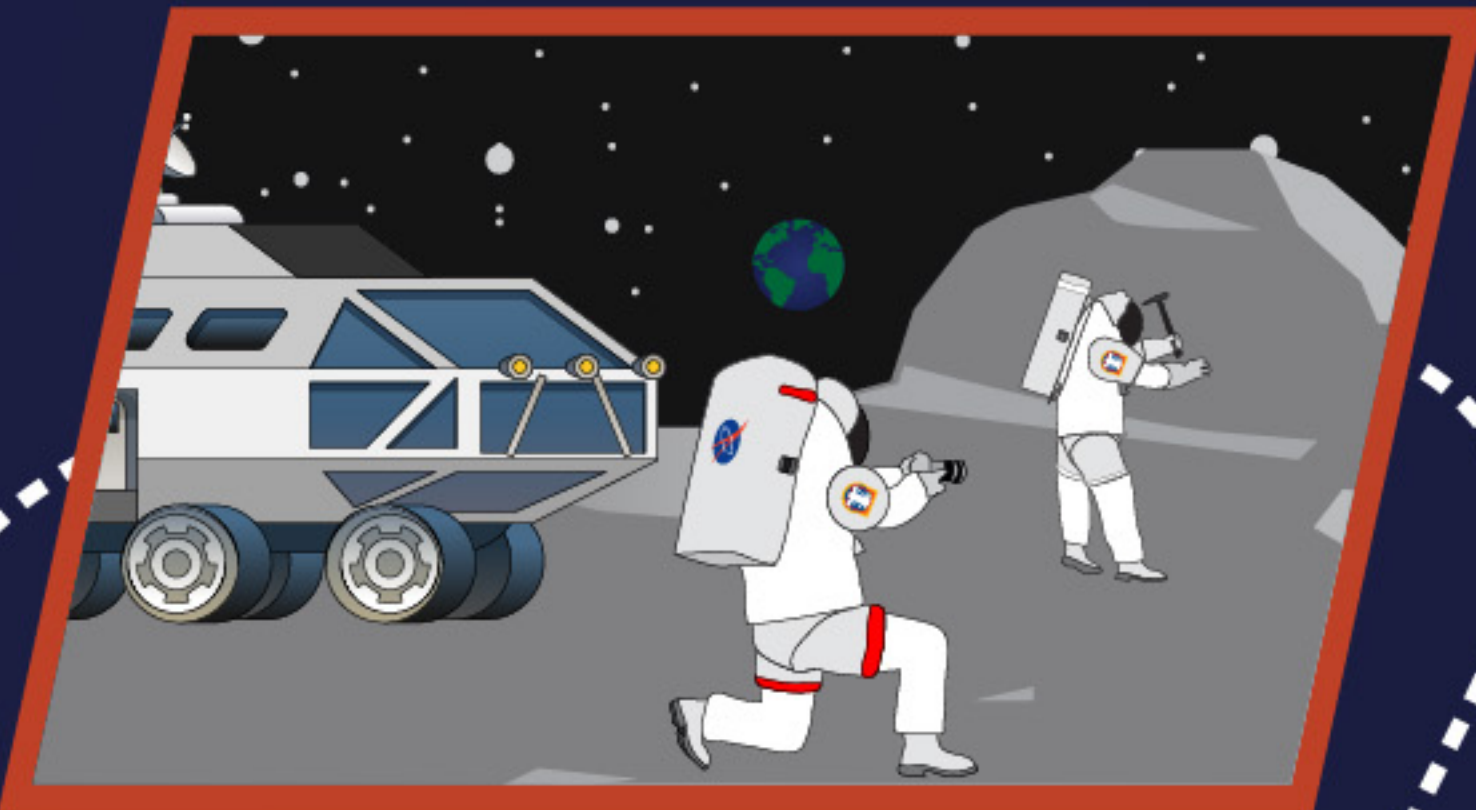


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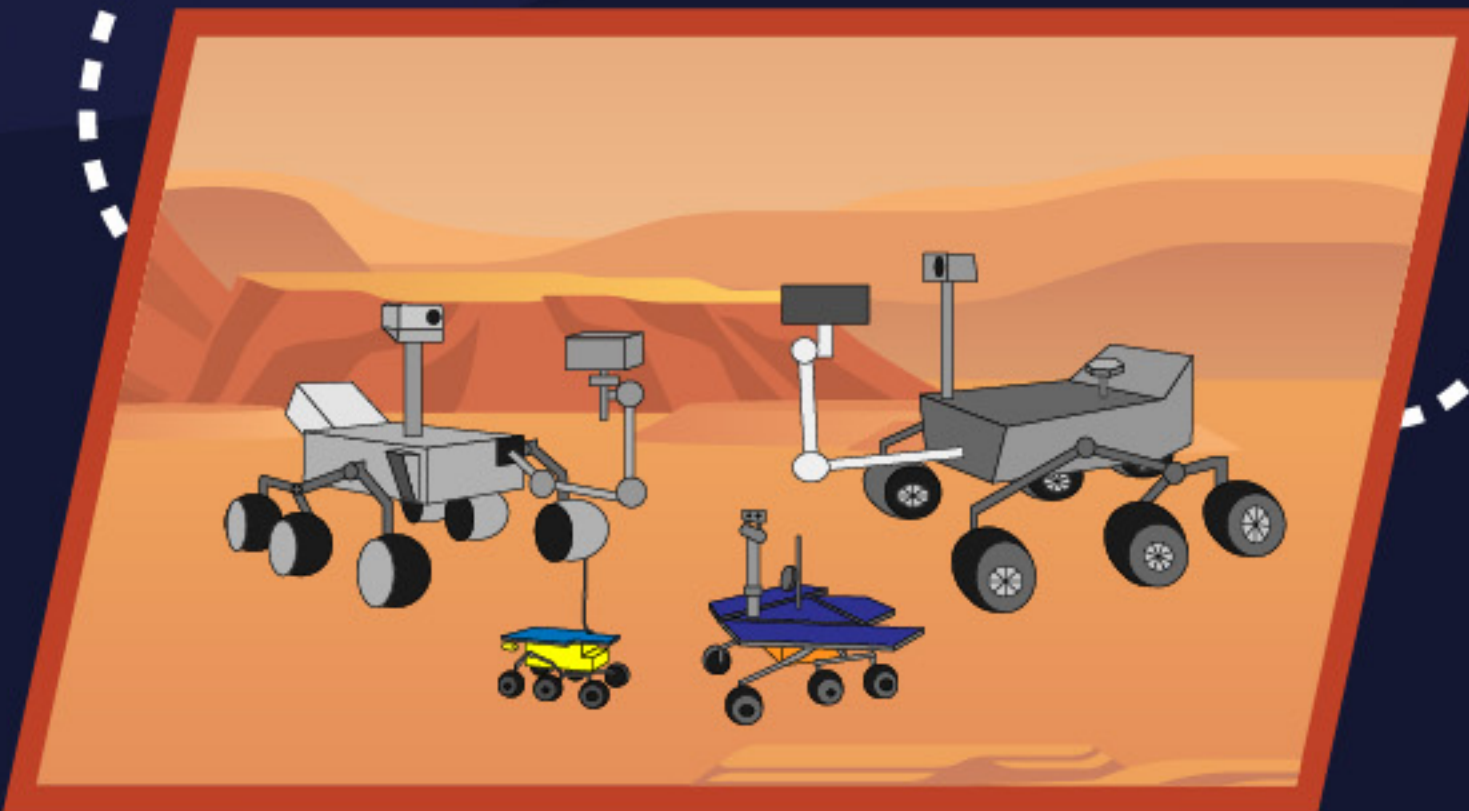


## Mission Objective

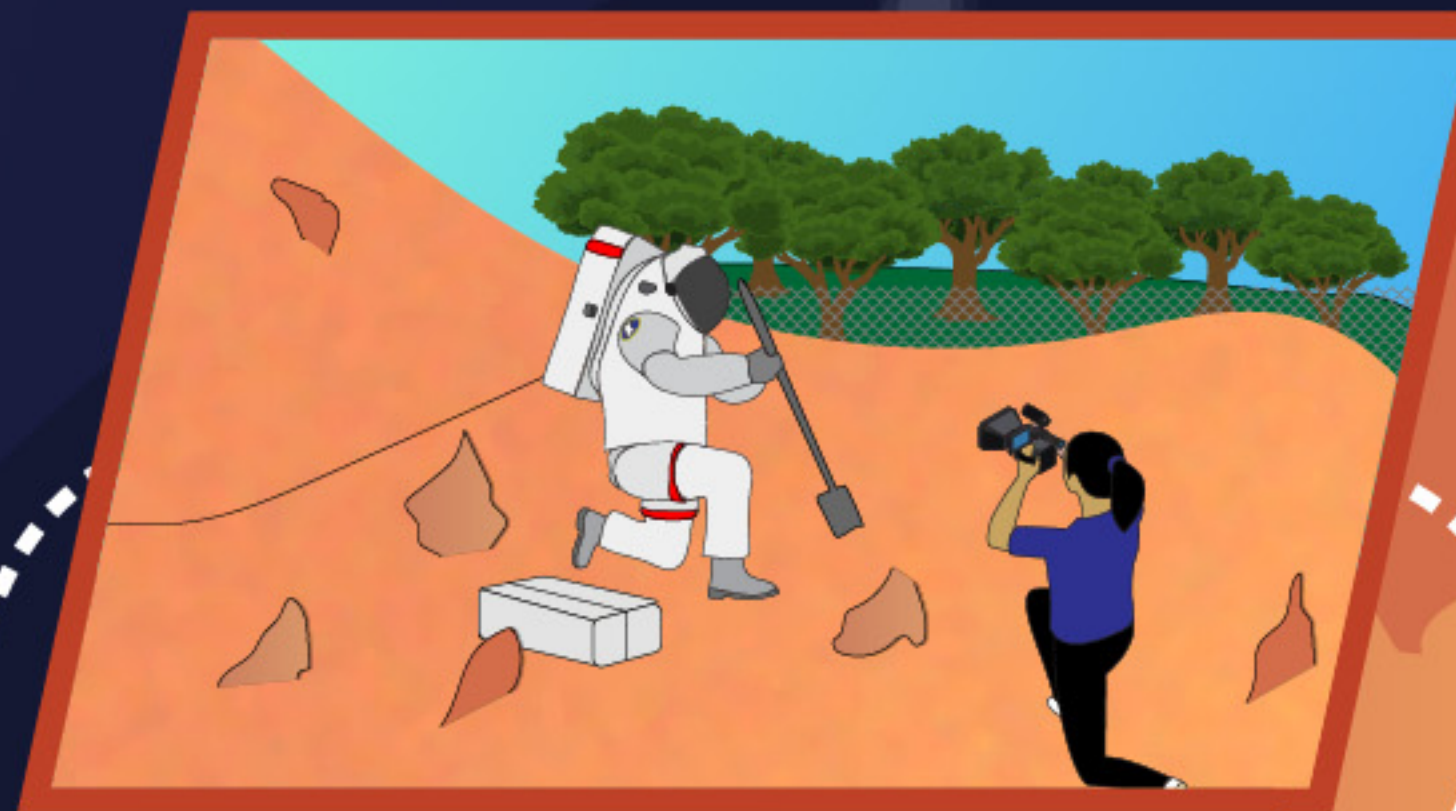
### 3) Conduct Human Exploration on Mars



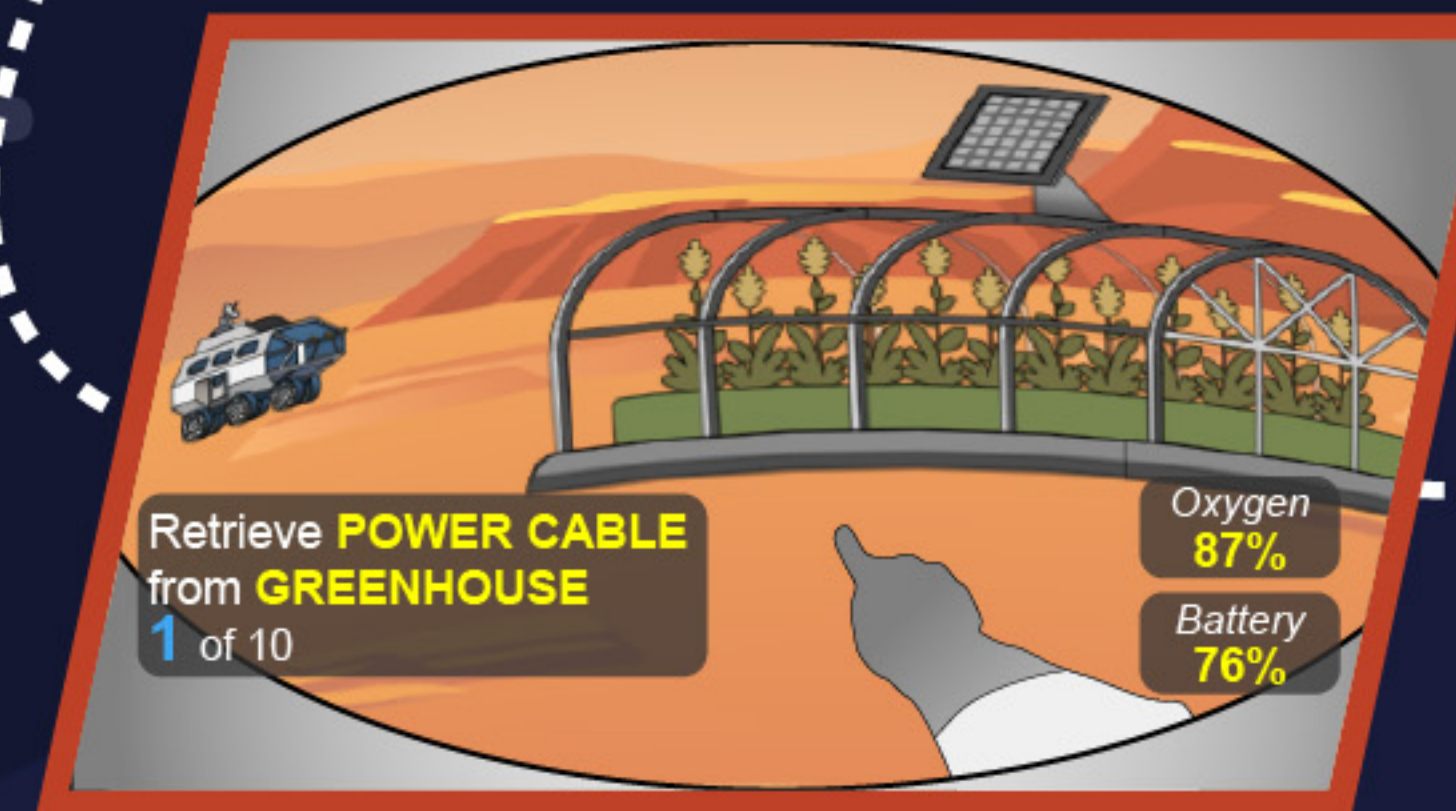
Technology testing and lessons learned from lunar exploration will guide development activities for Mars.



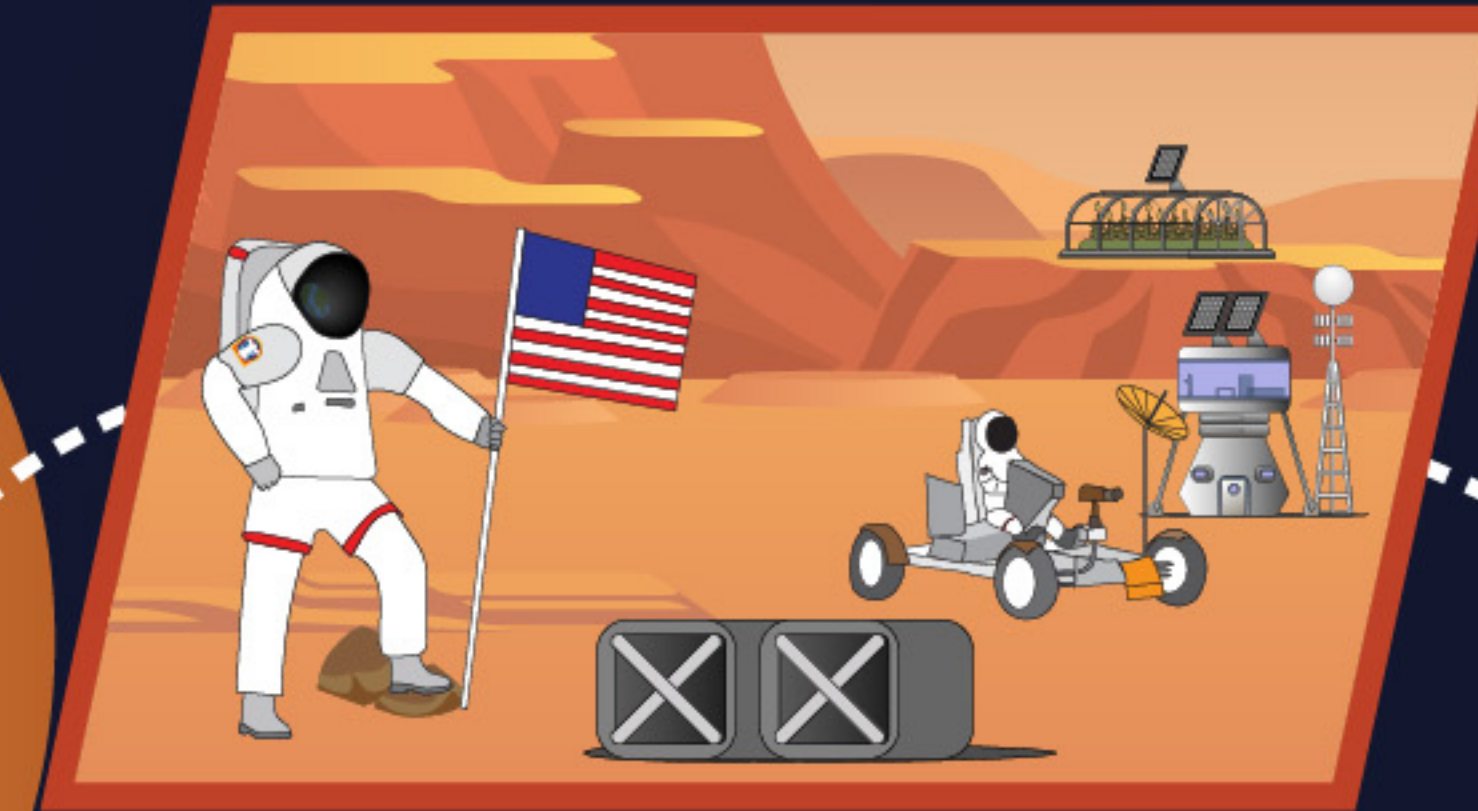
NASA has sent five rovers to the Martian surface to capture imagery, samples, and data to plan for Mars missions.  
**Bots before boots!**



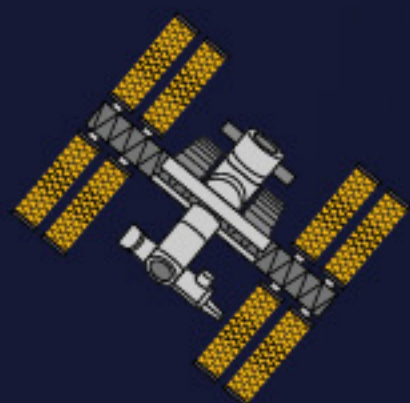
Science objectives are being defined that will inform operational development.



Advanced technologies, such as an EVA Heads Up Display, will increase safety and efficiency.



This is paving the way for planetary exploration and the establishment of a permanent settlement on Mars.



Past

Present

Future

Where will exploration take us next?