

# NEW <u>VIRTUAL</u> MISSION!

#### Featuring Former NASA Astronaut Dorothy Metcalf-Lindenburger

# **DESTINATION MARS**

#### **TEKS:** Investigation & Reasoning- 3.2.A-D, F 4.2.F, 4.3A, 4.4, 5.2.C-D, F, 5.4 Matter & Energy- 3.5A, 4.4A, 5.5A Earth & Space- 3.8.A-B, D, 4.8.A

Delivered in real-time, online by Challenger Learning Center Flight Directors.

Researchers are ready to explore Mars, but there's one glaring problem – more than 40 million miles separate Earth from Mars. Students will go on a mission to analyze data and determine which of the Red Planet's moons is the best location for building a research base.



- Designed for 4-6 grade students and aligned to national education and state standards
- 1-hour experience delivered from start to finish by a Flight Director
- Perfect for remote, hybrid, and socially distant classrooms
- Features small group and whole class activities
- Students need a device with audio and video capability and an internet connection
- No handouts or supplies needed
   Scobee Education Center

   at San Antonio College
   1819 N. Main Ave
   San Antonio, TX 78212
   210-486-0100
   Coordinator Heather Aguillon
   haguillon3@alamo.edu

# Give Your Students a Virtual Space Mission Experience!

The Mission: Researchers are ready to explore Mars, but there's one glaring problem – more than 40 million miles separate Earth from the Red Planet. This distance makes it impossible to travel back and forth between the two planets while completing our research. We need to build a base on one of the Red Planet's moons, Deimos or Phobos, that will allow us to send a spacecraft to the surface of Mars and back in the fastest and safest way possible. Student teams will select which moon is best to build a base by analyzing three sets of data collected by rovers on Deimos and Phobos.

The team's research efforts come to a halt when they encounter a critical emergency – a solar storm approaches and all communication signals are lost. To successfully explore Mars' moons and complete the mission, the students must work together to protect the rovers and restore communication, analyze the data from their experiments, and select a moon to build a base.



Student Teams: Teamwork is critical to our mission! Each student is assigned to a team and works with their small group to complete their research and analysis.



### **Geology Team**

Explore terrain maps to analyze the features of the lunar surfaces in search for a location for a suitable human habitat. Conduct tests at each of these locations to determine levels of iron found in the region.



**Navigation Team** Analyze terrain maps of the lunar surfaces to determine the best possible routes for the rovers. Explore interactive maps to analyze the satellite communication signals available in the area.



## **Rover Team**

Calibrate and examine all of the required instruments on the rover to aid in exploration. Select additional instruments to incorporate more design features to be used on future missions.



## **Conditions Team**

Conduct tests on both lunar surfaces to analyze the radiation exposure levels at each location, as well as temperature ranges found across the region.

# **Ready for Launch?!**

- Contact us to schedule your mission.
- Tell us how many students and teachers will participate.
- ✓ We send you the login information.
- ✓ The countdown begins. Leave the rest to us!

To engage our students and community in life-changing experiences that inspire the pathways to STEAM careers.



Development of Destination Mars was made possible with support from Northrop Grumman