



## Next Giant Leap: Lunar Rover

### Objective:

Students use a tablet-based app to assemble and program a rover to navigate and conduct experiments on the surface of the Moon.

### Materials Needed:

- ✓ Tablet
- ✓ Challenger Rover App (*only compatible with tablets*)



### Summary of Student Action:

Students will assemble a digital rover according to given specifications. They will then use block coding to program the rover to navigate the surface of the Moon to a designated location. Students will also program the rover to conduct experiments and gather data on the Moon.

### Setup Instructions:

- Download the Challenger Rover App onto the tablets. Please note: **THE APP IS ONLY COMPATIBLE WITH TABLETS**. The App can be downloaded for free on Android or Apple devices. Search “Challenger Center” to locate the app or click on the link below:
  - Google Play Store: [Download Challenger Rover Google Play Store](#)
  - Apple App Store: [Download Challenger Rover Apple App Store](#)
- Open the Challenger Rover app and select New Mission.
- Select the Moon missions and place the tablets at the station within student reach.

### Additional Notes:

The Rover App also has missions that take place on Mars. The app can lock Mars missions so that students can only complete the Lunar missions.



## Next Giant Leap: Lunar Rover

Explore the Moon with Rovers!

**Your task:** Assemble and program a rover to navigate and conduct experiments on the surface of the Moon.

**You will need:**

- ✓ Tablet
- ✓ Challenger Rover App



**Procedures:**

1. Find a tablet at the station.
2. Follow the instructions within the Rover App on the tablet at the station.
3. Complete as many Rover missions on the Moon as you can.