



SPACE COMMUNICATIONS AND NAVIGATION (SCaN) CHOICE BOARD

Grades 6-8

Engineer

Research Tracking and Data Relay Satellite (TDRS) online. Then, using materials found inside your home or classroom, build your own satellite for SCaN. Share a photo with your class.

Write

Imagine that you are a famous author writing your next story. Use your creative writing skills to tell a captivating story about Artemis, NASA's mission to land the first woman and the next man to the lunar surface.

Visualize

Use your artistic skills to draw a six-box comic strip that explains three aspects of space communications and navigation. Your comic should include color, dialogue, and SCaN related vocabulary.

Analyze



Compare and contrast NASA's Apollo and Artemis missions.

Solve



Scan the QR code and solve the Message Decoder Activity.

Read



Learn about lasers and write down six uses for laser technology.

Teach

Visit images.nasa.gov and search "space communications". Print ten of your favorite photos, create a poster with one fun communications fact for each photo, then present it to your class.

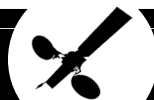
Record

Write a short script for a new TV commercial that includes four facts about how NASA communicates with spacecraft. Record and edit your TV commercial, then share it with your teacher.

Collaborate

Form a team of four classmates and research the Engineering Design Process (EDP). Then evaluate how each of the seven steps in the EDP would apply to an engineer designing a new navigation system for NASA SCaN.

Did You Know?



NASA SCaN utilizes a constellation of Tracking and Data Relay Satellites (TDRS) located 22,300 miles above the Earth's surface to provide communications and navigation services to missions in low Earth orbit.