Activity Guide Robotics and Satellites UNIT: ROBOTICS AND SATELLITES

Robotics and Satellites Activity Guide

Students will investigate robotics and satellites with a hands-on activity: navigating through a maze as a satellite while using commands from a robot.

Careers Highlighted	Materials
 Guidance, Navigation and Control Engineer Flight Dynamics Officer/ Engineer Systems Engineer Communication Engineer/ Specialist 	Maze #1 Maze #2 Blank maze Easel (or clip boards) Dry erase markers
Grade Level	Time for Activity
• Middle school (grade 6-8)	• 10 minutes
Activity	

- Using a standing easel (or two clipboards standing in an A shape), attach the <u>Maze #1</u> activity to one side of the easel and the <u>blank maze</u> to the other.
- Pair students, with one as the robot and one as the satellite.
 - The robot will stand on the side with $\underline{Maze \# 1}$.
 - The satellite will receive a dry erase marker and stand on the side with the <u>blank maze</u>.
- The Satellite should ask the Robot questions to figure out how to navigate the maze. The Robot can only respond with three commands at a time. The Satellite marks their moves on the Blank Maze with an "X" as they progress.
- The team accomplishes the goal when they successfully navigate from the starting point to the ending point in the maze without hitting any "objects".
- The team can repeat with <u>Maze #2</u> and the partners can switch roles this time.

Explore More!

Robotics and Satellites Lesson Plan

