Aeronautics TECHNOLOGY Resources

Package Delivery Drone Simulation

https://www.nasa.gov/sites/default/files/atoms/files/aam-package-delivery-drone-simulation-activity-guide_0.pdf

In this Scratch coding activity, students program the flight path of a delivery drone so that it avoids geofenced areas.

Video: X-59 and How Sound Travels

https://www.youtube.com/watch?v=IRUoL4SBIjM

This engaging video talks about how sound travels and how NASA engineers use this information when designing airplanes.

Aeronautics AR

Apple Version: https://apps.apple.com/us/app/aeronautics-ar/id1473958826

Android Version: https://play.google.com/store/apps/details?id=com.aeronauticsar.nasa

This augmented reality (AR) app is available for either Apple or Android devices and allows you to view some of NASA's X-planes in the area around you.

Make Your Own Battery

https://www.nasa.gov/sites/default/files/atoms/files/power_it_up.pdf

This activity guides students through the process of creating a working battery using common household resources.

Video: NASA Mars Helicopter Technology Demonstration

https://www.youtube.com/watch?v=oOMQOqKRWjU

This video discusses some of the technology used on NASA's Mars Perseverance, the first helicopter to fly on another planet.

Attack of the Drones – Coding Activity

https://www.nasa.gov/sites/default/files/atoms/files/aam-attack-of-the-drones-coding-activity-guide_0.pdf

This activity takes students through the process of coding a side scrolling game before challenging them to add to it.

Light-Up Paper Helicopter

https://www.nasa.gov/sites/default/files/atoms/files/x-57-maxwell-circuits-student-activities.pdf

Teach students about simple circuitry as they build a paper circuit on a paper helicopter template.

Mars Perseverance Parachute Coding Activity

https://www.nasa.gov/aeroresearch/stem/mars-perseverance-parachute-coding-activity

In this activity, you will learn how JPL engineers used a binary code to include a hidden message in the parachute used to help the Mars rover, Perseverance, land successfully on Mars.

DID YOU KNOW?

X-57

NASA's X-57 is an airplane powered completely by batteries. The technologies and verification and testing processes used for this plane will be instrumental in creating future aircraft that are environmentally friendly.