

4-H NYSD 2016: *Drone Discovery*

Supplemental Materials and Pre-Event Checklist

Your 4-H NYSD kit contains nearly everything you need to run a successful and fun 4-H NYSD event. However, since there are several different ways to administer the challenge, there are a few supplementary materials you may want to consider providing to make sure your event runs without a hitch. Consider the following:

- Computers – Having access to a computer or tablet with a USB port is required for the Foam Drone activity, although internet access is not. Having access to a computer with internet is required for Code Copters, however you can replace Code Copters with Code Copters (IRL).
- Masking Tape – It's always good to have tape on hand for repairs, especially when working with Styrofoam gliders. If you're planning to do Code Copters (IRL) instead of the Code Copters activity, you may also need tape to make a grid on the floor.
- Pennies – As part of the Take Off activity, you will need pennies to serve as nose weights for the FPG-9 gliders. They are also useful counter-weights for the glider in the Foam Drone activity.
- Scissors – You will need scissors to cut out the FPG-9 glider in the Take Off activity.
- Extra Velcro dots – The kit contains 10 pairs of Velcro dots (used to affix both the camera and counter-weights to the glider in the Foam Drone activity.) That should be plenty, but having more on-hand is never a bad idea since each Velcro dot has limited adhesive ability.

Since Drone Discovery is a multi-faceted challenge with several technology-related elements, there are a few things you should remember to prepare before your event. Consider the following:

- USB keychain camera
 - Remember to charge your camera for several hours before the event.
 - Make sure you plug the camera into your computer to ensure that your device is compatible and any necessary drivers are installed (they should install automatically once the camera is plugged in).
 - Test your camera! Make sure you familiarize yourself with the camera's controls, and even try shooting a test video or two. You'll want to be sure you can answer any camera-related questions during the event.
- Scratch – Online Coding Platform
 - Before your event, follow the instructions in your facilitator guide to create an account and log on to the Scratch platform. Locate the National Youth Science Day template.
 - Watch the instructional video about Scratch on the 4-H NYSD site.
 - Bookmark the Scratch page in our browser and write down your login information to ensure you're ready to go.
- Internet
 - If you are doing the Code Copters activity, make sure your space has internet connectivity during the day of your 4-H NYSD event.

