The **MAKER** Class
FAQ Sheet

What is the Maker Movement?

The Maker Movement is a technology based social movement focused on individuals creating new and useful devices in a DIY manner. The Maker Movement utilizes the power of collaboration on a global scale to create and share ideas, software and hardware that is continuously improved on by anyone willing to contribute. The software and hardware that arise from these global communities is commonly known as open source technologies. The Maker Class empowers those with the creativity and desire to create useful devices or gadgets that have implications beyond this project, and can be useful in the real world.

Who can exhibit in this class?

Any youth that is enrolled in ANY 4-H project area can exhibit in the maker class.

Does the youth have to build a device or can they just design it?

All exhibits must be MUST be manufactured/built by the exhibitor (If not fully manufactured by the exhibitor, the device MUST be modified structurally or be reprogramed to perform a different function other than what it was designed to do.

What is Open Source, and does the project have to include open source technologies?

Open Source technologies are software or hardware that is created and shared openly by an individual maker or group. With open source software, the source code of the program or app is freely available to download, use and modify to your needs. This is in contrast to a closed source program or app that cost money and can only be used but not modified. Open source hardware may have a fee associated with it, but the plans and specs are available for makers to modify the hardware to their needs. Projects do not necessarily need to use open source technologies, however must be accompanied by detailed build logs and a bill of materials which will make them a part of the open source universe.

What qualifies as a maker project?

Exhibits must be an object or device that has an intended purpose and uses technology in either a mechanical way, digital (computer) way, or combination of the two. The device must be something that can be used in everyday life by multiple people (a target audience), and MUST be manufactured/built by the exhibitor (If not fully manufactured by the exhibitor, the device MUST be modified structurally or be reprogramed to perform a different function other than what it was designed to do. Exhibit MUST be able to interact with the outside world. (e.g. an on off switch, input sensors, feedback, etc.) and MUST include a detailed build log and bill of materials. A 3D printed or laser cut object alone does not qualify for this class. Projects will be judged on originality, real world applications and market viability, ability to explain design process and concepts, as well as the appearance and build log/bill of materials.

Examples include:

A weather station that updates a farmer on current weather conditions
A Raspberry Pi based device that keeps track of animals on a farm
A device that recognizes friends that come over for sleep overs
A new design for a mechanical blender
A light up shirt for night time bike riders
A homemade videogame arcade that uses open source software as the operating system.
A handheld device used for identifying insects on freshly picked fruit
And so much more!!!

Please contact illinoisSTEM-4H@illinois.edu for more details