COMPUTER SCIENCE
Each county may submit 3 entries total from 50158, 50159, 50160, 50161, 50162, 50163, and 1 entry from 50164.

Exhibitors may bring computer equipment for demonstration purposes. Computers will not be furnished. Internet connections are not available for use by exhibitors. Any member found to be using computer software in a manner that infringes on copyright laws will be disqualified.

50158  **Beginning Visual Programming: (Open to youth in Computer Science 1 or Computer Explore)** Exhibit a simple program using Scratch (or other simple graphic programming language). The program should include 8 different commands including looping and getting input from the keyboard and mouse. All exhibits must include something visual, such as a poster or printed copy of a digital presentation, which will remain on display during the exhibition. Electronic equipment will only be used during your personal judging time and will not remain on display during the entire exhibit period.

50159  **Intermediate Visual Programming: (Open to youth in Computer Science 1 or Computer Explore)** Exhibit a program using Scratch (or other simple graphic programming) that you have downloaded from the internet and modified. Compare the two programs and demonstrate the changes you made to the original program; OR create an animated storybook using Scratch (or other simple graphical programming language). All exhibits must include something visual, such as a poster or printed copy of a digital presentation, which will remain on display during the exhibition. Electronic equipment will only be used during your personal judging time and will not remain on display during the entire exhibit period.

50160  **Advance Visual Programming: (Open to youth in Computer Science 1 or Computer Explore)** Exhibit a video game you have created in Scratch (or other simple graphic programming). All exhibits must include something visual, such as a poster or printed copy of a digital presentation, which will remain on display during the exhibition. Electronic equipment will only be used during your personal judging time and will not remain on display during the entire exhibit period.

50161  **Website Design: (Open to youth in Computer Explore only)** Exhibit an original website that you have designed. Internet access will not be provided, so exhibitors must supply their own internet hot spot or the website must be hosted on the exhibitor’s computer. All exhibits must include something visual, such as a poster or printed copy of a digital presentation, which will remain on display during the exhibition. Electronic equipment will only be used during your personal judging time and will not remain on display during the entire exhibit period.

50165  **Open Source Computer Science: (Open to youth enrolled in Computer Science 1, Computer Explore, Robotics 1-2, Junk Drawer Robotics 1-3)** Exhibits in this class will demonstrate successful application of open source (publicly available) computing software and/or hardware, such as Raspberry Pi and Linux, to accomplish a task. All exhibits must include something visual, such as a poster or printed copy of a digital presentation or programing flowchart, which will remain on display during the exhibition.

50162  **Computer Innovation Class: (Open to youth who were at least 13 years of age on 9/1/16 and are enrolled in a computer project.)** Exhibit an original program using a higher level programming language such as Python, Javascript, C++, etc. All exhibits must include something visual, such as a poster or printed copy of a digital presentation, which will remain on display during the exhibition. Electronic equipment will only be used during your personal judging time and will not remain on display during the entire exhibit period.

50163  **Computer Clover Challenge: (Open to 15- to 18-year-olds enrolled in the Computer Clover Challenge Project who have completed all previous computer projects.)** Exhibits in this category should go "above and beyond" what the 4-H project books cover and should represent an accumulation of years of project study. The
exhibit may include, but isn’t limited to, original works, objects, demonstrations, digital presentations, programs, websites, games, apps, performances, or posters which you have made. Choose whatever method best shows what you’ve learned. You must furnish any equipment you need for your exhibit. Internet service will not be provided for the exhibit. All exhibits must include something visual, such as a printed copy of a digital presentation, which will remain on display during the exhibition. Electronic equipment will only be used during your personal judging time and will not remain on display during the entire exhibit period. The completed Illinois 4-H Clover Challenge Agreement must be presented with the exhibit.

50164 Computer Science Ready4Life Challenge: (Open to 11- to 18-year-olds enrolled in any Computer project) Exhibits in this category must include the following: a) a physical representation of the career or business product such as a model, prototype or display/portfolio that includes images of accomplished work; b) verbal or written explanations that demonstrate knowledge of the related career or business fields, potential careers, and the appropriate requirements for achievement in those fields. The judging criteria for this class values thoroughness of career and/or business exploration and pursuit above the workmanship of the physical specimen on display.