

PC.

Value is placed on youth that can model the learning process, or show how their skills have increased while completing the project.

The youth exhibitor should identify a problem to solve or create a work application involving technology. Possible ideas might include: applying existing software programs to a 4-H project area, composing music, developing a game, drawing landscape scenes, designing buildings, publishing club newsletters, creating a website, editing a video, working with photographs, etc.

Online projects using Google applications or other Web 2.0 software are acceptable. Youth must make sure clear directions are given in the project explanation so the judges can find and access the project online. Website exhibits must be viewable online or on a disk, CD or thumb/travel drive.

Exhibits entered in the "Programming" class must be a program written, translated, or substantially (at least 30%) altered by the 4-H member. Programming projects please submit a hard copy or thumb/travel drive for programs with excessive pages such as GameMaker software.

861 100 1 __ Computer Software Application, Word Processing

Description: Projects created by youth that show learning in the area of word processing. Project should be an original creation by the participant that shows their word processing skills. See additional exhibit requirements, above, for Technology classes. Evaluation: Use Computer Software Application Evaluation available at: <http://oregon.4h.oregonstate.edu/fair-exhibit-and-contest-materials>

861 101 1 __ Computer Software Application, Excel/Spreadsheet

Description: Projects created by youth that show learning in the area of spreadsheet design and usage. The exhibit should be a spreadsheet or chart within an Excel document, not a chart imported in to a word processing program. Project should be an original creation by the participant that shows their spreadsheet skills. Intermediate and Senior members are expected to have some formula usage in their project. See additional exhibit requirements, above, for Technology classes. Evaluation: Use Computer Software Application Evaluation available at: <http://oregon.4h.oregonstate.edu/fair-exhibit-and-contest-materials>

861 102 1 __ Computer Software Application, Presentation Software

Description: Projects should be created by youth to show learning in the area of presentation design skills. Software can be any current presentation software including online versions like Google applications or voicethread.com. Project should be created by the participant to show their presentation design skills. Youth can also submit video clips of how the presentation was used. (For example: A video clip of the youth using the presentation in a group activity.) See additional exhibit requirements, above, for Technology classes. Evaluation: Use Computer Software Application Evaluation available at: <http://oregon.4h.oregonstate.edu/fair-exhibit-and-contest-materials>

[test-materials](#)

861 103 1 __ Computer Software Application, Graphic Design/Digital Imaging

Description: Projects created by youth that show learning in the area of graphic design or digital imaging. Software can be any current presentation software including online versions. Project should be created by the participant to show their graphic design or digital imaging skills. See additional exhibit requirements, above, for Technology classes. Evaluation: Use Computer Software Application Evaluation available at: <http://oregon.4h.oregonstate.edu/fair-exhibit-and-contest-materials>

861 104 1 __ Computer Software Application, Database Management

Description: Projects created by youth that show learning in the area of database management. Project should be an original creation by the participant that shows their spreadsheet skills. Intermediate and Senior members are expected to have apply their projects to real world scenarios. Youth are responsible for submitting clear directions on how judges can access the files. See additional exhibit requirements, above, for Technology classes. Evaluation: Use Computer Software Application Evaluation available at: <http://oregon.4h.oregonstate.edu/fair-exhibit-and-contest-materials>

861 105 1 __ Computer Software Application, Multimedia Projects

Description: Projects created by youth that show learning in the area of Multimedia Projects. Software can be any current software including online versions. Project should be created by the participant to show their multimedia skills. In general, multimedia includes a combination of text, audio, still images, animation, video, or animation. Multimedia combines multiple content forms. Youth are responsible for submitting clear directions on how judges can access the files. See additional exhibit requirements, above, for Technology classes. Evaluation: Use Computer Software Application Evaluation available at: <http://oregon.4h.oregonstate.edu/fair-exhibit-and-contest-materials>

861 100 2 __ Computer Programming

Description: Projects created by youth that show learning in the area of programming. Project should be created by the participant to show their programming skills. Hard copy or travel/thumb drive (for programs with excessive pages, such as GameMaker software) of the program must be submitted. It is up to the youth to ensure the program will function or display at Fair. Intermediate and Senior members are expected to have applied their projects to real world scenarios. Youth are responsible for submitting clear directions on how judges can access the files. See additional exhibit requirements, above, for Technology classes. Evaluation: Use Computer Programming Evaluation available at: <http://oregon.4h.oregonstate.edu/fair-exhibit-and-contest-materials>

861 100 3 __ Computer Hardware Design

Description: Projects created by youth that show learning in the area of hardware. Project should be an original creation by the participant that shows their computer hardware skills. It is up to the youth to ensure the hardware and project will function or dis-

play at Fair. Intermediate and Senior members are expected to have apply their projects to real world scenarios. Youth are responsible for submitting clear directions on how judges can access the files. See additional exhibit requirements, above, for Technology classes. Evaluation: Use Computer Hardware Evaluation available at: <http://oregon.4h.oregonstate.edu/fair-exhibit-and-contest-materials>

861 100 4 __ Computer 3D Printer Application

Description: Projects created by youth that show learning in the area of 3D design and printing on a 3D printer. Project should be an original creation by the participant that shows their skills. Each Exhibit must include the item created with the 3D printer and a series of screen shots from the design software that show the (1) early stages, (2) middle stages and (3) final stages of the design process. Application Project Description for the exhibit form filled out neatly and securely attached to the exhibit. 4-H Project Description sheets are posted at <http://oregon.4h.oregonstate.edu/node/1858>. See additional exhibit requirements, above, for Computer classes. Evaluation: Use Computer Software Application Evaluation available at: <http://oregon.4h.oregonstate.edu/node/1858>

ROBOTICS PROJECT

863 102 1 __ Education poster- Junk Drawer Robotics Level 1

An educational poster on any robotics topic youth learned about in Junk Drawer Robotics, Level 1, Give Robots a Hand, addressing the theme robotic arms, hands and grippers. Display should demonstrate knowledge gained in one of these topics: Posters must not exceed 22"x28". Judging criteria are outlined on the *4-H Education Display Check Sheet* (40-463) available from the county Extension Office or the state 4-H website at <http://oregon.4h.oregonstate.edu/fair-exhibit-and-contest-materials>

863 102 2 __ Education poster- Junk Drawer Robotics Level 2

An educational poster on any robotics topic youth learned about in Junk Drawer Robotics, Level 2, Robots on the Move, addressing the theme moving, power transfer and locomotion. Display should demonstrate knowledge gained in one of these topics: Posters must not exceed 22"x28". Judging criteria are outlined on the *4-H Education Display Check Sheet* (40-463) available from the county Extension Office or the state 4-H website at <http://oregon.4h.oregonstate.edu/fair-exhibit-and-contest-materials>

863 102 3 __ Education poster- Junk Drawer Robotics Level 3

An educational poster on any robotics topic youth learned about in Junk Drawer Robotics, Level 3, Mechatronics, addressing the theme the connection between mechanical and electronic elements. Display should demonstrate knowledge gained in one of these topics: Posters must not exceed 22"x28". Judging criteria are outlined on the *4-H Education Display Check Sheet* (40-463) available from the county Extension Office or the state 4-H website at <http://oregon.4h.oregonstate.edu/fair-exhibit-and-contest-materials>

863 103 1 __ Robotics / Lego Robotics