

SCIENCE, ENGINEERING & TECHNOLOGY PROJECTS

MECHANICAL SCIENCE

This division includes small engine projects. You may enter one exhibit in which you are currently enrolled. Exhibits will be judged on their individual merit using the following criteria.

1. What the member has learned.
2. How the display communicates to the public what was done.
3. Workmanship of basic skills in project area where appropriate.

In each class the exhibit shall be an educational exhibit or display which will show or illustrate what the member has learned. **Include an explanation telling:** (a) how the exhibit was made or what was done, (b) how the exhibit is to be used (if appropriate), (c) operating instructions (if appropriate), and (d) what the member learned by doing the project. **Explanations are required** to qualify the exhibit for judging. If a kit is used, indicate on tag.

407 700 001 - Junior

407 700 002 - Intermediate

407 700 003 - Senior

407 700 004 - Club

ELECTRIC ENERGY

Exhibits will be any of the articles included in the project manuals, or other articles that show skills learned in the project. Items must be labeled with member's name, county, and class number. To qualify for judging, an *Electric Energy Explanation Card* must be attached. Forms are available at the county Extension offices and at the State 4-H website: <http://oregon.4h.oregonstate.edu/fair-exhibit-and-contestmaterials>. **Intermediates and seniors include a schematic diagram.**

862 100 001 - Junior

862 100 002 - Intermediate

862 100 003 - Senior

WOODWORKING

In each class, the exhibit shall be one article or pair of articles made of wood by the 4-H member. Completed "Woodworking Explanation Card" 871-02 is required to qualify the exhibit for judging. Judging criteria are outlined on 4-H Woodworking Exhibit Score Card (40-635), available at the county Extension office or on the State 4-H website at: <http://oregon.4h.oregonstate.edu/fair-exhibit-and-contest-materials>



871 100 001 - Junior

871 100 002 - Intermediate

871 100 003 - Senior

TECHNOLOGY

NOTE: Any 4-H member may enter an exhibit in the computer area. You do not have to be enrolled in the computer project to enter.

Print version of the program must be submitted. Youth are responsible for submitting clear directions on how judges can access the files. Value is placed on youth that can model the learning process, or show how their skills have increased while completing the project. Participant should answer the description page carefully and in full sentences. **In addition to exhibit tag and information sheet, each exhibit must be labeled with the member's name, county and exhibit class number. If more than one article is contained in the exhibit then each article must be labeled (as above) and attached to each other. This may be done with masking tape/index card with a marker or writing directly on the back with a marker.**

Note: Identify a problem to solve or a project to work 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.

To qualify for judging each exhibit must have a *4-H Project Description* securely attached. <http://oregon.4h.oregonstate.edu/fair-exhibit-and-contest-materials>

Project Description Sheets and Judging Evaluations can be found at: <http://oregon.4h.oregonstate.edu/fair-exhibit-and-contest-materials>

You may include disks or CDs as part of your exhibit. If you do, all files must be: -Compatible with a PC

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 CD format.

- 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 with all exhibits.

Note: Fill in the blank in class number (___) with one of the following numbers.

First year in this project area:

11 - Junior 12 - Intermediate 13 - Senior

Second year and beyond:

21 - Other Junior 22 - Other Intermediate 23 - Other Senior 34 - Club Exhibit



841 100 1() Renewable Energy

Description: Projects involving youth learning and displaying knowledge about Renewable Energy or Sustainable Living. Value is placed on youth that can model the learning process, or show how their skills have increased while completing the project. Participant should answer the description page carefully and in full sentences.

861 100 1() 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. Value is placed on youth that can model the learning process, or show how their skills have increased while completing the project. Participant should answer the description page carefully and in full sentences. Evaluation: Use Computer Software Application Evaluation available at: <http://oregon.4h.oregonstate.edu/fair-exhibit-and-contest-materials>

861 101 1() Software Application, Excel/Spreadsheet

Description: Projects created by youth that show learning in the area of spreadsheet design and usage. 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. Value is placed on youth that can model the learning process, or show how their skills have increased while completing the project. Participant should answer the description page carefully and in full sentences. Evaluation: Use Computer Software Application Evaluation available at: <http://oregon.4h.oregonstate.edu/fair-exhibit-and-contest-materials>

861 102 1() 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.) Youth are responsible for submitting clear directions on how judges can access the files. Value is placed on youth that can model the learning process, or show how their skills have increased while completing the project. Participant should answer the description page carefully and in full sentences. Computer Software Application Evaluation available at: <http://oregon.4h.oregonstate.edu/fair-exhibitand-contest-materials>

861 103 1() 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. Youth are responsible for submitting clear directions on how judges can access them or program. Value is placed on youth that can model the learning process, or show how their skills have increased while completing the project. Participant should answer the description page carefully and in full sentences. Evaluation: Use Computer Software Application Evaluation available at: <http://oregon.4h.oregonstate.edu/fair-exhibit-and-contest-materials>

861 104 1() 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. Value is placed on youth that can model the learning process, or show how their skills have increased while completing the project. Participant should answer the description page carefully and in full sentences. Evaluation: Use Computer Software Application Evaluation available at: <http://oregon.4h.oregonstate.edu/fair-exhibit-and-contest-materials>

861 105 1() 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. Value is placed on youth that can model the learning process, or show how their skills have increased while completing the project. Participant should answer the description page carefully and in full sentences. Evaluation: Use Computer Software Application Evaluation available at: <http://oregon.4h.oregonstate.edu/fair-exhibit-and-contest-materials>

861 100 2(_ _) **Programming**

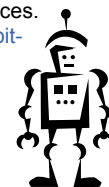
Description: Projects created by youth that show learning in the area of programming. Project should be created by the participant to show their programming skills. Hard copy of program must be submitted, and it is up to the youth to ensure the program will function or display at Fair. Intermediate and 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. Value is placed on youth that can model the learning process, or show how their skills have increased while completing the project. Participant should answer the description page carefully and in full sentences. Evaluation: Use Computer Programming Evaluation available at: <http://oregon.4h.oregonstate.edu/fair-exhibit-and-contest-materials>

861 100 3(_ _) **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 display 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. Value is placed on youth that can model the learning process, or show how their skills have increased while completing the project. Participant should answer the description page carefully and in full sentences. Evaluation: Use Computer Hardware Evaluation available at: <http://oregon.4h.oregonstate.edu/fairexhibit-and-contest-materials>

863 102 1(_ _) **Lego Construction Display**

Description: An original creation built out of Legos. The project does not need to be robotic. Participant should answer the description page carefully and in full sentences. Evaluation: Use Lego Evaluation available at: <http://oregon.4h.oregonstate.edu/fair-exhibit-and-contest-materials>



863 103 1(_ _) **Robotics**

Description: Project should involve youth created robots. They can be created from kits or from miscellaneous parts. All robots will be returned after fair. More weight is given for youth designed projects. Robot and full description of what it is meant to accomplish must be submitted. Robots will be judged on structural stability, creativity, functionality. Youth are responsible for submitting clear directions on how judges can access the files and make robot function. Value is placed on youth that can model the learning process, or show how their skills have increased while completing the project. Participant should answer the description page carefully and in full sentences. Evaluation: Use Robotic Evaluation available at: <http://oregon.4h.oregonstate.edu/fair-exhibit-andcontest-materials>

860 100 1(_ _) **GPS/GIS, Projects**

Description: GPS or GIS Projects. Projects consist of a detailed goal, and multiple applications of either GPS or GIS skills. A conclusion is reached, a problem was evaluated or studied, a solution was found (or the problem was better defined) Value is placed on youth that can model the learning process, or show how their skills have increased while completing the project. Participant should answer the description page carefully and in full sentences Evaluation: Use Map Evaluation available at: <http://oregon.4h.oregonstate.edu/fair-exhibit-andcontest-materials>

860 101 1(_ _) **GPS/GIS, Maps**

Description: A map is a single product of the data gathering, manipulation and presentation skills. Maps can be computer generated or hand drawn. Multiple maps should be entered under GPS/GIS Projects. Value is placed on youth that can model the learning process, or show how their skills have increased while completing the project. Participant should answer the description page carefully and in full sentences. Evaluation: Use Map Evaluation available at: <http://oregon.4h.oregonstate.edu/fair-exhibit-andcontest-materials>

860 200 1(_ _) **Geography**

Description: Projects involving youth learning and displaying knowledge about geography. Value is placed on youth that can model the learning process, or show how their skills have increased while completing the project. Participant should answer the description page carefully and in full sentences. Evaluation: Use Geography Evaluation available at: <http://oregon.4h.oregonstate.edu/fair-exhibit-andcontest-materials>
Online Ideas: <http://www.myWonderfulWorld.org>

851 100 1(_ _) **Aerospace/Aeronautics**

Description: Projects involving youth learning and displaying knowledge about Aerospace or Aeronautics. Value is placed on youth that can model the learning process, or show how their skills have increased while completing the project. Participant should answer the description page carefully and in full sentences. Evaluation: Use Aerospace/Aeronautics Evaluation available at: <http://oregon.4h.oregonstate.edu/fairexhibit-and-contest-materials>



852 100 1(_ _) **Rocketry**

Description: Projects involving youth learning and displaying knowledge about Rocketry. Value is placed on youth that can model the learning process, or show how their skills have increased while completing the project.

Participant should answer the description page carefully and in full sentences. Rocket launch may be available at Oregon State Fair. If launch is not available, projects will be based on rockets and write ups regarding a group launch. Evaluation: Use Rocketry Evaluation available at: <http://oregon.4h.oregonstate.edu/fair-exhibit-andcontest-materials>

EXPRESSIVE ARTS

ART

Members may enter up to three classes in the Original Art division and up to three classes in the Non-original Art division, **no more than one entry per class number**. Art has two divisions based on whether the entry is entirely **original** or includes components that have been designed or **created by others**. In both divisions, the member will be expected to create their work by applying the elements and principles of design.

Artwork may not be framed with the exception of work done with chalks. If work done with chalks is framed, light weight frames with plastic rather than glass should be used for protection during display. No glass is allowed.

Backing or mounting of artwork is strongly encouraged, if appropriate. Matting, spray fixatives and/or over wrap with plastic are acceptable for protection of the artwork. If an item is meant to hang, a hanger that will support the weight of the item must be securely attached. Adhesive plastic hangers are encouraged to protect other artwork. They are available at the Extension Office.

All work done on an item that is wearable clothing or accessory must be exhibited in a Wearable Art category.

Exhibits should not contain parts that expose the public or volunteers to injury (i.e. sharp edges or points.)

Exhibits are entered and displayed at the risk of the exhibitor; see rule 12 under General 4-H Information – Eligibility.

In addition to the exhibit tag, each piece of an exhibit must be labeled on the back or bottom with the member's name, county, and exhibit class number.

To qualify for judging, a fully completed 4-H Art Exhibit Explanation card must be attached. Forms are available at the county extension offices or on the State 4-H website at: <http://oregon.4h.oregonstate.edu/fair-exhibit-and-contest-materials>. Public display of exhibits will be at the discretion of 4-H Management.

Note: Fill in the blank in class number () with one of the following numbers.

1 - Junior 2 - Intermediate 3 - Senior



ORIGINAL ART

Member applies the elements and principles of design to create work that is entirely their own.

Drawing and Sketching

- 231 100 01() **Line drawing** - original work using line technique with any drawing medium that can make a distinct line. Medium examples might include pencil, colored pencil, scratch art, pen & ink, felt tip.
- 231 100 02() **Shaded drawing** - original work using shading technique with any drawing medium. Medium examples might include chalk, charcoal, pastels, pencil, and colored pencil.
- 231 100 03() **Line and Shaded Combination drawing** - original work using a combination of line and shading techniques.

Painting

- 231 100 04() **Water Color, Tempera, or Other Water Media** - original painting using a water media (identify media used)
- 231 100 05() **Acrylic painting** - original work using acrylic paint media
- 231 100 06() **Oil painting** - original work using oil paint media

Print Making or Stenciling

- 231 100 07() **Print or Stencil** - original work using print making or stenciling techniques with a design created by the member (Use of purchased commercial stencils is not appropriate.)