4-H ROBOTICS

Superintendent:
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Exhibits are entered on Tuesday, July 31, from 10 am to 8 pm at the Clark County Fair Grounds in the Event Center Exhibit Hall A – 4-H Still Exhibit Area.

The Robotics exhibits will be located/exhibited in South Hall 3 from August 5 - 14 during the Clark County Fair.

STEWARDSHIP: Exhibitors are required to do stewardship at the Robotics Display area. Failure to do so will mean that his or her premium will be withheld.

JUDGING:
Judging will start at 10 am Saturday, August 4, 2018. Exhibitors who are demonstrating their robots for judging should be at the demonstration area at 9:50 am to sign up for a time to demonstrate.

RULES & REGULATIONS:

1) Exhibitors must be enrolled in the Robotic Project.
2) Project should involve youth created robots. They can be created from kits or from miscellaneous parts. Robots will be entered on Tuesday, July 31 at the Clark County Fairgrounds, Event Center, Exhibit Hall A, 4-H Still Exhibit area.
3) All Robotic Project entries will be available for pick up on Sunday, August 12, from 10-11 pm.
4) Robot and full description of what it is meant to accomplish must be submitted with entry.
5) Robots will be judged on structural stability, creativity, and functionality. More weight is given for youth designed project.
6) Youth are responsible for submitting clear directions on how judges can access the files and make robot function.
7) Exhibitors can have a total of 10 entries in the Robotic Divisions, with no more that two of the same Class.
8) Points will be awarded by the judge using this guideline: 1-content, 2-neatness, 3-Dificulty
9) <u>A 3x5 card is required with the following information for each entry.</u>
    A. Introduction
        1) Your age, grade completed, number of years in robotic project, club name
    B. Project
        1) What project did you select?
        2) Why did you decide to do this project?
    C. Materials
        1) What materials did you use (Lego pieces, miscellaneous parts)
        2) What made you choose these materials?
    D. Steps
        1) List the steps that you used to create your project (instructions from a kit, self-designed).

E. Results
   1) Show an example of your final project (model or picture)
   2) Did you like the project
   3) Was the final project what you expected it to be when you were done?
   4) If you were to do it again would you have done anything differently – explain?
   5) What did you learn from your experience?

All participants in Divisions 912-Robot Built Using Instructions and 913- Robot Built Without Using Instructions must take part in a Robotics demonstration in order to obtain their premiums. The Robotics demonstration sign up is Saturday, August 4, 2018 at 9:50 am. Questions - please contact Superintendent Brenda Johnson (360) 606-9334 or brendaj608@msn.com

Division 912: ROBOT PROJECT BUILT BY INDIVDUAL USING INSTRUCTIONS
Points: Blue 14, Red 10, White 6
No more than 1 entry in each Class. No more than 3 entries total in the class.

CLASS 1 – Robot project built with Lego parts, using instructions. The robot should include information pages detailing the function of the robot. Include comments about robot performance and problems encountered while building. Include at least one photo of the robot project performing a task.
A. Junior 8-10 yrs. of age as of October 1 of current 4-H year
B. Intermediates 11-13 yrs. of age as of October 1 of current 4-H year
C. Senior 14- and less than 19 as of October 1 of current 4-H year

CLASS 2 – Robot project built with primarily non Lego parts, using instructions. The robot should include information pages detailing the function of the robot. Include comments about robot performance and problems encountered while building. Include at least one photo of the robot project performing a task.
A. Junior 8-10 yrs. of age as of October 1 of current 4-H year
B. Intermediates 11-13 yrs. of age as of October 1 of current 4-H year
C. Senior 14- and less than 19 as of October 1 of current 4-H year

CLASS 3 – Programming copied from instructions. Programming must be printed for judging and placed into a document cover or clear folder. The program should include details such that the judge can easily understand the function of the program. Include comments about robot project performance and problems encountered during programming. Include at least one photo of the robot project
A. Junior 8-10 yrs. of age as of October 1 of current 4-H year
B. Intermediates 11-13 yrs. of age as of October 1 of current 4-H year
C. Senior 14- and less than 19 as of October 1 of current 4-H year

DIVISION 913: ROBOT PROJECT BUILT BY AN INDIVDUAL WITHOUT USING A KIT OR DETAILED
Points: Blue 26, Red 20, White 14
No more than 1 entry in each class. No more than 3 entries total in the class.

CLASS 1 – Robot project built using only Lego parts. The robot should include information pages detailing the function of the robot. Include comments about robot performance and problems encountered while building. Include at least one photo of the robot project performing a task.

A. Junior 8-10 yrs. of age as of October 1 of current 4-H year
B. Intermediates 11-13 yrs. of age as of October 1 of current 4-H year
C. Senior 14- and less than 19 as of October 1 of current 4-H year

CLASS 2 – Robot project built using primarily non-Lego parts. The robot should include information pages detailing the function of the robot. Include comments about robot performance and problems encountered while building. Include at least one photo of the robot project performing a task.
A. Junior 8-10 yrs. of age as of October 1 current 4-H year
B. Intermediates 11-13 yrs. of age as of October 1 current 4-H year
C. Senior 14- and less than 19 as of October 1 of current 4-H year

CLASS 3 – Original programming, no instructions used. Programming must be printed for judging and placed into a document cover or clear folder. The program should include details such that the judge can easily understand the function of the program. Include comments about robot project performance and problems encountered during programming. Include at least one photo of the robot project.
A. Junior 8-10 yrs. of age as of October 1 of current 4-H year
B. Intermediates 11-13 yrs. of age as of October 1 of current 4-H year
C. Senior 14- and less than 19 as of October 1 of current 4-H year

DIVISION 914: ROBOT PROJECT DESIGN AND DISPLAY
Points: Blue 14 Red 10 White 6
No more than 1 entry per class. No more than 3 entries total in the class.

CLASS 1 – 3D Robot design using software package. Printout showing no less than 3 different views. Include comments detailing the function of the robot project and any problems encountered while completing the design.
A. Junior 8-10 yrs. of age as of October 1 of current 4-H year
B. Intermediates 11-13 yrs. of age as of October 1 of current 4-H year
C. Senior 14- and less than 19 as of October 1 of current 4-H year

CLASS 2 – Craft showing any robotics topic. Include comments detailing reasons you chose to create the craft project.
A. Junior 8-10 yrs. of age as of October 1 of current 4-H year
B. Intermediates 11-13 yrs. of age as of October 1 of current 4-H year
C. Senior 14- and less than 19 as of October 1 of current 4-H year

CLASS 3 – Notebook or poster showing a learned skill (with drawings and explanations) or presenting a robotics event attended (with pictures and explanations).
A. Junior 8-10 yrs. of age as of October 1 of current 4-H year
B. Intermediates 11-13 yrs. of age as of October 1 of current 4-H year
C. Senior 14- and less than 19 as of October 1 of current 4-H year

Division 916: ROBOT Project built by a group without using a kit or detailed instructions
Ribbons Only – Exhibition (first year)
No more than 1 entry per group in each class. No more than 3 entries per group total in the class.

Write number of members in the group on the exhibit form. Premium points will be multiplied by the number of group members. Maximum 10 members to a group. Premiums will be sent to the club.

CLASS 1 – FLL Team Robot designed for competition. The robot should include information pages detailing the function of the robot. Include comments about robot performance and problems encountered while building. Include at least one photo of the robot project performing a task.
A. Junior 8-10 yrs. of age as of October 1 of current 4-H year
B. Intermediates 11-13 yrs. of age as of October 1 of current 4-H year
C. Senior 14- and less than 19 as of October 1 of current 4-H year

CLASS 2 – FTC Team Robot designed for competition. The robot should include information pages detailing the function of the robot. Include comments about robot performance and problems encountered while building. Include at least one photo of the robot project performing a task.
A. Junior 8-10 yrs. of age as of October 1 of current 4-H year
B. Intermediates 11-13 yrs. of age as of October 1 of current 4-H year

CLASS 3 – FRC Team Robot designed for competition. The robot should include information pages detailing the function of the robot. Include comments about robot performance and problems encountered while building. Include at least one photo of the robot project performing a task.

C. Seniors: 14- and less than 19 as of October 1 of current 4-H year

CLASS 4 –Group Robot project. The robot project should include information pages or a trifold poster detailing its function. Include comments about robot project performance and problems encountered while building. Include at least one photo of the robot project performing a task.
A. Junior 8-10 yrs. of age as of October 1 of current 4-H year
B. Intermediates 11-13 yrs. of age as of October 1 of current 4-H year
C. Senior 14- and less than 19 as of October 1 of current 4-H year

CLASS 5- Original programming, no instructions used. Programming must be printed for judging and placed into a document cover or clear folder. The program should include details such that the judge can easily understand the function of the program. Include comments about robot project performance and problems encountered during programming. Include at least one photo of the robot project. Do not put individual programs in this lot. This lot is for programs written by more than one individual.
A. Junior 8-10 yrs. of age as of October 1 of current 4-H year
B. Intermediates 11-13 yrs. of age as of October 1 of current 4-H year
C. Senior 14- and less than 19 as of October 1 of current 4-H year
Curriculum can be located at:
http://www.4-hmall.org/Catalog/SearchResults.aspx?SearchQuery=robotics

DIVISION 917 – ROBOTICS KNOWLEDGE BOWL
August 12, 2018 – 2 pm – 4-H Robotics Area
Check with 4-H Leader or Superintendent Brenda Johnson (360-606-9334) for information details. Ribbons Only- year 1 exhibition
CLASS - 1

A. Junior	8-10 yrs. of age as of October 1 of current 4-H year
B. Intermediates	11-13 yrs. of age as of October 1 of current 4-H year
C. Senior	14- and less than 19 as of October 1 of current 4-H year