# **DEPARTMENT 230 – 4-H JUNK DRAWER ROBOTICS CONTEST**

To prepare, youth should be familiar with the level 2 junk drawer robotics book (especially how to build a circuit and attach a motor to a power source- if they know these basics they will have success, hint, hint)...There will be a separate challenge for each age division. Teams will receive a challenge kit with all of the supplies and tools needed to engineer their robot. They can score extra points by bringing a poster or tri-fold display about their club.

The contest will take place in the back of Building 3 (the UF IFAS Extension Building- formerly where the county booths have been). The awards ceremony will take place at 2PM at the stage next to the 4-H Building.

### **DEPARTMENT 230 – 4-H JUNK DRAWER ROBOTICS CONTEST**

**CHAIRPERSON:** Heather Kent

**ENTRY DEADLINE:** Teams MUST pre-register with Chairperson by October 1st

CHALLENGE DESIGN AND BUILD TIME: Saturday, November 14, 2015 10:30AM – 12:00PM

**ROBOT DEMONSTRATION AND JUDGING:**12:00PM - 1:00PM

AWARDS PROGRAM: Saturday, November 14, 2015 2:00PM – 3:30PM

**RULES & REGULATIONS** 

- 1. Contest open to 4-H members only.
- 2. **Three teams** may enter **per county** as selected by that county's Extension representative.
- 3. Junior, Intermediate, and Senior Divisions will be judged separately.
- 4. Teams are limited to four (4) participants, but must have a minimum of two (2) participants.
- 5. Team check in will start at 10AM on Saturday, November 14th at the back of building 3.
- 6. Each age division will be given a challenge and a supply kit to build a robot out of everyday objects to complete a task or action. Challenges will not be released until 10:30AM.
- 7. In order to prepare for this contest, teams should be familiar with the 4-H Junk Drawer Robotics Project. Contact your 4-H Agent for a copy of this project book, or purchase a copy for your team online at: <a href="http://www.4-hmall.org/Category/robotics.aspx">http://www.4-hmall.org/Category/robotics.aspx</a>.
- 8. What to bring:
  - 1. A copy of your 4-H participation form for each youth and adult.
  - 2. A team display- this will be used to decorate your pit area and showcase the great things you are doing and learning in 4-H. The display can take any form you choose. It could be a tri-fold tabletop display with pictures and text, or a slide show with captions, a video, poster, or banner. Your team display will count as 20% of your total team score. The rest of your score will be based on your robot's design, capacity, and performance.
  - 3. Your teamwork and engineering skills this is your chance to showcase your creativity, innovation, and collaboration skills!

# **DEPARTMENT 230 – 4-H JUNK DRAWER ROBOTICS CONTEST**

- 4. A great 4-H attitude- this is a fun contest to test your skills, learn what other 4-Hers are doing, and show off all of your hard work. Come ready to have fun and learn!
- 9. Do NOT bring any spare parts or tools for your junk drawer robot. All of your supplies and tools will be provided.
- 10. Scoring each challenge will have its own scoring rubric and will be available when the challenges are released. Each age division will have its own challenge. Scorekeepers will record points earned during each round, and the Junk Drawer Engineering Award will be presented to the top team in each age division. Additional awards be will presented for the following in each age division:
  - Clover Award team notable for exemplary demonstration of 4-H values including teamwork, cooperation, generosity, responsibility, and respect for others.
  - 2. **Mechanical Ingenuity Award** team whose junk drawer robot is notable for its out-of the-box design.

### **DIVISION A – JUNIOR DIVISION**

Any 4-H'er who reaches his/her 8th birthday by September 1st of the current 4-H year and has not passed his/her 10th birthday by September 1st of the current 4-H year.

## **DIVISION B** –INTERMEDIATE DIVISION

Any 4-H'er who reaches his /her 11<sup>th</sup> birthday by September 1<sup>st</sup> of the current 4-H year and has not passed his/her 13<sup>th</sup> birthday by September 1<sup>st</sup> of the current 4-H year.

## **DIVISION C – SENIOR DIVISION**

Any 4-H'er who reaches his/her 13th birthday prior to September 1st of the current 4-H year and has not passed his/her 19th birthday or graduated from high school prior to September 1st of the current 4-H year.

**CLASS 1:** Engineering Award

**CLASS 2:** Clover Award

**CLASS 3:** Mechanical Ingenuity Award

### Premium Schedule

Engineering Award – \$40.00 & Trophy Clover Award – \$20.00, Trophy Mechanical Ingenuity Award – \$20.00, Trophy

(Each member of the winning teams will receive a strip ribbon.)