Robotics

Suggested exhibits include, but are not limited to, a notebook including a printout of code with requirements marked, a flowchart showing how the robot works, images of the robot being built and the final robot in action, a video, a live demonstration, or other applicable exhibits.

Beginner Grades 3-5:

* **Create a flowchart**
* **Build a robot**

ͦ Use block-based program to operate

ͦ Sequential programs

ͦ Events at beginning

ͦ Use at least one basic sensor

Intermediate Grades 6-8:

* **Create a flowchart with sub-routines**
* **Include at least two sensors in robot**
* **Use at least three events in code**
* **Create 2 loops in code**
* **Operation of robot should be smooth**

**Advanced Grades 9-12:**

***Above guidelines plus:***

* **Use text-based language**
* **Use advanced logic including**
  + **Multiple (three or more) events**
  + **Multiple (three or more) loops**
  + **At least three sub routines**

**Special consideration if robot is not a kit**