

# Pocahontas County Science and Engineering Fair High School (Grades 9-12) Rules

## All Projects

1. Students must be in grades 9-12 and live in Pocahontas County.
2. Each student may only enter one project.
3. Students enrolled in full-time virtual instruction are eligible to submit projects for competition at the school level.
4. Homeschool students who contact the school to participate in the fair may be accepted on a case-by-case basis.
5. **No group or team projects.**
6. Each project may only include research conducted this calendar year, beginning January 2020.
7. Projects must be registered within one of the twenty-one ISEF categories. The school can further narrow these down: for example, into Engineering, Life Sciences, Chemistry, and Physical Sciences.
  - a. A list of ISEF categories can be found [here](#).
8. No copying of another researcher's work is allowed.
9. Projects must follow all local, state, and federal laws and regulations.
10. The following forms are **required for each project**:
  - a. WVSEF Rules Agreement – Found [here](#).
  - b. ISEF Approval Form – Found [here](#).
  - c. Abstract – Found [here](#).
  - d. ISEF Adult Sponsor Checklist – Found [here](#).
  - e. ISEF Student Checklist – Found [here](#).
11. Projects that are demonstrations, "library" research, informational projects, or "explanation" models are not recommended nor appropriate.
12. No student or school names may appear on abstracts or projects.
13. No students' or participants' facial photographs may appear on abstracts or projects.
14. The Fair Director has final say on matters not covered in the fair rules.

## Project Displays and Videos

15. The display must be no more than 108 inches tall, 48 inches wide, and 30 inches deep, and must be freestanding (does not need to lean against a wall).
16. All images not created by the student must be properly cited
17. The following are **prohibited** from displays:
  - a. Student or school names
  - b. Student or participant facial photographs

- c. Live animals
  - d. Flames, highly flammable materials, or heat sources (hot plates, etc.)
  - e. Dry ice
  - f. Weapons and ammunition (including toys and replicas)
  - g. Sharp items (knives, needles, etc.)
  - h. Tobacco products
  - i. All hazardous or potentially hazardous substances or deices (poisonous chemicals, drugs, etc.)
  - j. Batteries with open-top cells (car, motorcycle batteries, etc.)
  - k. Any item intended for distribution
  - l. Any personal information, including websites, email accounts, social media handles, etc.
  - m. Any item prohibited by Board of Education policies
  - n. Any item a fair coordinator deems to be unsafe or inappropriate.
18. Any video submitted to the state fair must be between 3 and 5 minutes long.

### **Competition and Judging**

- 19. Schools may direct judges to use the WV Science & Engineering Science Fair Judging Form on page 8 of the [Science & Engineering Fair Project Guide](#), or they may develop their own judging guide
- 20. Projects in the same division and the same grade band (elementary, middle, and high school) will be judged against each other.
- 21. For each grade band, the judges will determine one "best of fair" project.
- 22. The "best of fair" project will submit a 3-5 minute video presentation to the West Virginia State Fair between March 1 and March 12, 2020.

### **Prohibited Projects**

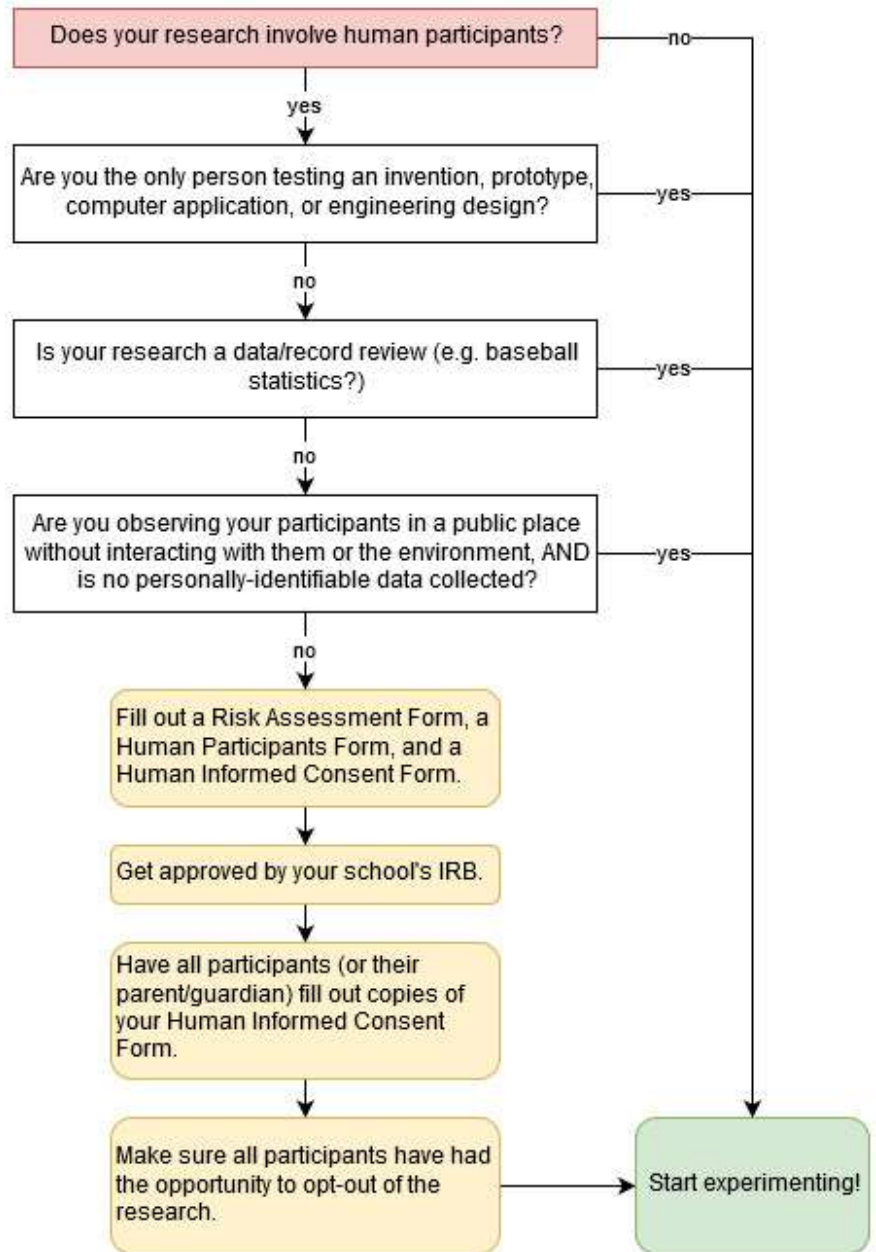
- 23. The following are prohibited with **no exceptions**:
  - a. The introduction or disposal of non-native, genetically-altered, and/or invasive species, pathogens, toxic chemicals, or foreign substances into the environment. See the [USDA Animal and Plant Health Inspection Service](#) and the [West Virginia Division of Natural Resources](#) for information on quarantines.
  - b. Projects where a student independently diagnoses disease, administers medication, or performs medical procedures.
  - c. Vertebrate animal research (including humans) that involves pain, withholding of food or water, induced toxicity, predator/prey relationships, or catching and/or trapping wild animals.
  - d. Projects done at home that involve microorganisms, including (but not limited to) mold, bacteria, viruses, prions, fungi, and parasites.
  - e. Projects where consumable ethyl alcohol is produced by distillation.

- f. Projects involving radiation that require more than 25 kvolts of power.

**Projects Involving Human Participants**

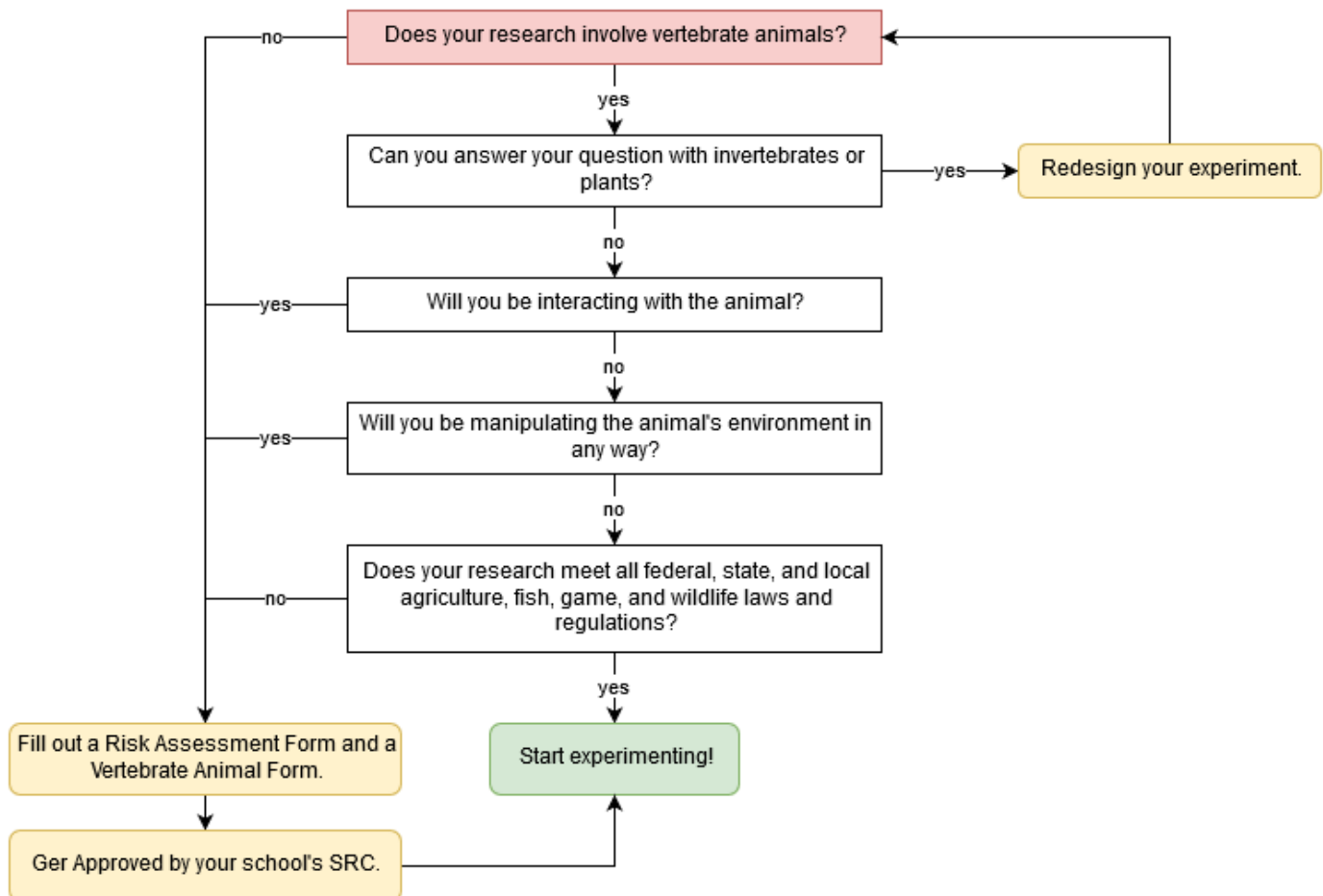
- 24. All rules from the ISEF must be followed; see pages 8-11 of the [Guidelines for Science and Engineering Fairs](#).
- 25. The following forms are required for some projects involving human participants:
  - a. ISEF Risk Assessment Form – Found [here](#).
  - b. ISEF Human Participants Form – Found [here](#).
- 26. An ISEF Human Informed Consent Form **for each participant** – Found [here](#).

- 27. Some projects involving humans must be reviewed by an Institutional Review Board, which includes an educator, a school administrator, and a medical or mental health professional, **before** experimentation begins.
  - a. For more information on IRBs, see page 6 of the [Guidelines for Science and Engineering Fairs](#).
  - b. The Green Bank Observatory will assist in setting up an IRB upon request. Contact Luci Finucan at lfinucan@nrao.edu to request help with this.



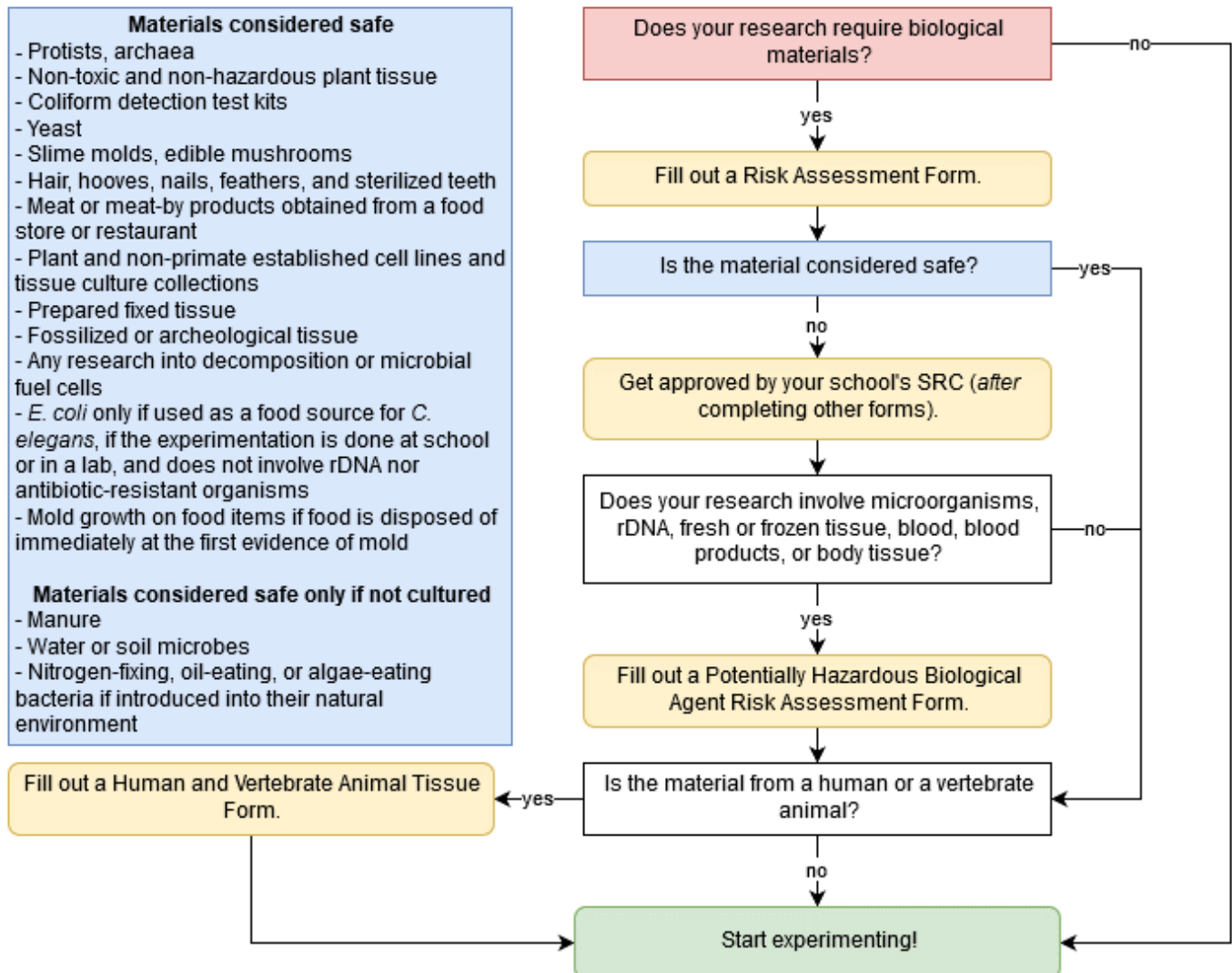
## Projects Involving Non-Human Vertebrate Animals

28. All rules from the ISEF must be followed; see pages 12-14 of the [Guidelines for Science and Engineering Fairs](#).
29. The following forms are required for some projects involving vertebrate animals:
- ISEF Risk Assessment Form – Found [here](#).
  - ISEF Vertebrate Animals Form – Found [here](#).
30. Some projects involving vertebrate animal must be reviewed by a Scientific Review Committee, which includes a Doctor of Veterinary Medicine, an educator, and one additional member, **before** experimentation begins.
- For more information on SRCs, see page 6 of the [Guidelines for Science and Engineering Fairs](#).
  - The Green Bank Observatory will assist in setting up an SRC upon request. Contact Luci Finucan at [lfinucan@nrao.edu](mailto:lfinucan@nrao.edu) to request help with this.



## Projects Involving Biological Agents

31. All rules from the ISEF must be followed; see pages 15-18 of [Guidelines for Science and Engineering Fairs](#).
32. The following forms are required for **some** projects involving biological agents:
  - a. ISEF Risk Assessment Form – Found [here](#).
  - b. ISEF Potentially Hazardous Biological Agents Risk Assessment Form – Found [here](#).
  - c. ISEF Human and Vertebrate Animal Tissue Form – Found [here](#)
33. Some projects involving biological materials must be reviewed by a Scientific Review Committee, which includes an educator, a professional in the field that the project involves, and one additional member, **before** experimentation begins.
  - a. For more information on SRCs, see page 6 of the [Guidelines for Science and Engineering Fairs](#).
  - b. The Green Bank Observatory will assist in setting up an SRC upon request. Contact Luci Finucan at lfinucan@nrao.edu to request help with this.
34. If the samples come from living humans or vertebrate animals, make sure to follow the rules for Projects Involving Human Participants and/or for Projects Involving Non-Human Vertebrate Animals.



## **Projects Involving Hazardous Chemicals, Activities, or Devices**

35. The following form is **required** for projects involving hazardous chemicals activities, or devices, including DEA-controlled substances, prescription drugs, alcohol, tobacco, firearms, explosives, unmanned aerial vehicles (drones), or radiation:
  - a. ISEF Risk Assessment Form – Found [here](#).
36. All projects involving hazardous chemicals, activities, or devices must be done under the direct supervision of an adult.
37. All other rules from the ISEF must be followed; see pages 19-21 of the [Guidelines for Science and Engineering Fairs](#).
38. Some projects involving hazardous chemicals, activities, or devices must be reviewed by a Scientific Review Committee, which includes an educator, a professional in the field that the project involves, and one additional member, **before** experimentation begins.
  - a. For more information on SRCs, see page 6 of the [Guidelines for Science and Engineering Fairs](#).
  - b. The Green Bank Observatory will assist in setting up an SRC upon request. Contact Luci Finucan at [lfinucan@nrao.edu](mailto:lfinucan@nrao.edu) to request help with this.

