

TEXAS FARM BUREAU AG INQUIRY SCIENCE FAIR DETAILS & GUIDELINES

GOAL

The goal of the Ag Inquiry Science Fair (AISF) is to encourage 5th grade students to engage in inquiry-based learning that focuses on agriculture. AISF gives students an opportunity to research, ask questions, test their current knowledge, and challenge themselves to find answers and information that expand their understanding of agriculture and how it plays a role in everything they do each day. Agriculture today looks much different than it did just five years ago. AISF challenges students to think outside the box to learn about advancements in agriculture that are often overlooked. Informed consumers become informed leaders and change makers, and we want to encourage young students to embrace an inquiring mindset that never stops learning.

ETHICS STATEMENT

With a goal that seeks to encourage learning through honest inquiry, each participant should take intentional care to present information in a way that credits the appropriate sources. The final project should be a compilation of various resources and information that ultimately lead the participant to produce a project that is their own. Research from a previous project can be used as a component of the project if such research is properly cited. Instruction from a teacher, parent, or other mentors should not inhibit the participant from producing their own questions, understanding, and final components of the project. To truly challenge oneself, students should research their inquiries, critically reflect, and connect all research in a way that builds understanding and moves the student closer to becoming an informed learner and consumer. All materials submitted for the project must be true, and plagiarism or cheating of any kind will result in full elimination.

GUIDELINES

TEKS Alignment:

The goal for AISF is that projects align with the following 5th Grade TEKS, so student work will reflect grade-level standards and material learned in the classroom.

Science

- 3A, C; 4; 6A; 8A, B; 9 (life science); 10B (life science)

English Language Arts

- 7C, F; 13 A, B, C, E, F, G, H

Social Studies

- 12B

CATEGORIES

Students will submit individual projects. No group projects will be accepted. The categories and corresponding descriptions below are meant to guide students as they choose the correct category for their projects. However, the descriptions are not meant to stifle the students' creativity in forming inquiries. Students should consider the economic feasibility, impact, and/or the effects of supply and demand on the component of agriculture they are inquiring about, no matter the category.

- Animal Science

Projects in this category will focus on various farm animals, such as beef cattle, dairy cattle, swine, poultry, etc. The main inquiry of projects in this category will explore questions about why and how animals are produced, live, function, and thrive, as well as health considerations that might include veterinary care techniques, vaccines, and more. This category might also include inquiries about breeding and care of livestock.

- Agronomy

Projects in this category will focus on the science behind crops, the soil they are grown in, and the necessary components for healthy growth and yield.

- Technology in Agriculture

Projects in this category will focus on technology that is used on farms and ranches for efficiency, yield considerations, safety, and other important elements of agriculture.

- Water Systems/Conservation

Projects in this category will focus on water systems and conservation practices used in agriculture that allow crops and animals to grow in the hot, Texas climate. The projects might also look at reasons why conservation is an important consideration in agriculture.

- Sustainability in Agriculture

Projects in this category will focus on how agriculture has evolved to become more sustainable as land availability decreases and the population increases.

**Teachers are encouraged to introduce their students to Journey 2050, an interactive computer game that helps students better understand sustainability and yield. Access to the game is free and can be found here: <http://www.journey2050.com>.*

PROJECT COMPONENTS

- Project Description and Video Submission

Due by November 13 to Texas Farm Bureau <https://forms.gle/5HuHfDtP3HXUZshDA>

- ▶ Students will submit completed projects as a video presentation

- ▶ Video Must Include:

- Information from the introduction page [provided by TFB (see below) and included in the Google Form]
- A synopsis of the inquiry project
 - Must be between 3-5 minutes
 - Outline project prompt, category, findings, and how the project was completed. Students must clearly state this information in the video.
 - Display should be completed to present in video submission
 - Creativity is encouraged

- Display Requirements

No models. Poster presentation.

- ▶ Display Rules:

- A tri-fold poster should be used to display the project details
- No glass

- No student identification information on display
- No electricity
- ▶ Students are encouraged to be creative and present their findings in an interesting way that draws the attention of the judges
- ▶ Pictures are encouraged
Please cite pictures (i.e. website, credit if taken by someone the student knows, etc.)
- ▶ Display should include research information that student finds/learns during inquiry
Please cite any information used that is not the student's own observation, etc.
- Project Journal
 - ▶ Journal throughout the project and submit as a PDF with the other project components via the submission link.
 - Track progress of inquiry. Consider the below questions. *(It is suggested to record beyond these questions. They simply serve as guidance.)*
 - What are you investigating each day?
 - What questions did you ask, answer, or are still searching for?
 - How did you research? / What tools did you research?
 - Did you utilize website research, interviews, information from class lessons, etc.?
- Sources
 - ▶ Students must include at least five sources in their research but are encouraged to use more. All sources MUST be cited.

When Students Begin Research/Work on Project:

- ▶ Students can begin project in early Fall 2020
- ▶ Encourage students to think about what they did, saw, or learned about during the summer that could be a topic in one of the approved categories

JUDGING

- Project Description and Video
 - ▶ Judges will score the overall video presentation
- Display
 - ▶ Judges will score the displays
- Journal (written portion)
 - ▶ Judges will score the journal when submitted with the other project components
- Awards
 - ▶ First, second, and third place will be awarded for each category
 - ▶ Scores from each component will be combined to determine placing

IMPORTANT DATES

- November 13, 2020: Submissions Due
- December 2020: Winners Announced

AISF AWARDS PACKAGE

All participants will receive the following items:

- T-shirt
- Texas Farm Bureau key chain

All 1st place winners in each category will receive the following items:

- iPad Air with sleeve

- 1:1 video conversation with a Texas Farm Bureau representative
- Texas Farm Bureau-branded backpack

All 2nd place winners in each category will receive the following items:

- iPad mini
- 1:1 video conversation with a Texas Farm Bureau representative
- Texas Farm Bureau-branded backpack

All 3rd place winners in each category will receive the following items:

- Drone
- 1:1 video conversation with a Texas Farm Bureau representative
- Texas Farm Bureau drawstring backpack

SUBMISSION

Projects are due November 13.

Students will submit their projects via a Google Form:

[**https://forms.gle/5HuHfDtP3HXUZshDA**](https://forms.gle/5HuHfDtP3HXUZshDA)