

STUDENT GUIDE TO SCIENCE DAYS



Science Days is a program designed for students to explore STEM topics of interest through Hypothesis-Based Research, Meta-Analysis, or Engineering Design Projects. Participants can showcase their projects at local, regional, and state competitions, where they can earn sponsored awards and academic recognition. By participating in Science Days, students not only gain a deeper understanding of STEM subjects, but also experience the processes that lead to new discoveries, drive innovation, and improve our way of life!

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Who Can Participate?

Students in grades 5-12 are eligible to participate in Science Days!

How Do I Get Started?

1. Locate a teacher or other professional who will supervise the work.

If no one is available to help you and oversee your project, please contact The Ohio Academy of Science at info@ohiosci.org to request a class code to join our online classroom.

2. Create a ProjectBoard Account

ProjectBoard is an online social learning platform used by the Ohio Academy of Science for building, submitting, and judging projects. Students must create a ProjectBoard account to participate in Science Days.

To Create a ProjectBoard Account:

- Visit ProjectBoard at <https://projectboard.world/oas>
- Select “Student Portal”
- Select the red “Start Now” button.
- Complete the ProjectBoard account creation questions.
- Write down your username and password in a safe place for future reference.

3. View the Science Day Standards document (found in ProjectBoard Science Day Resources)

4. View the Science Day Judging Card (found in ProjectBoard Science Day Resources)

Project Choices

Students can choose to complete one of the following projects:

Hypothesis Based Research Project

Students use the Scientific Method to conduct an experiment and report their results.

Meta Analysis Project

Students use the Scientific Method to combine and analyze data from various sources. Instead of conducting their own experiment, students explore new relationships or evaluate data in a broader context.

Engineering Design

Students use the Engineering Design process where they build and test a prototype, then report their results.

Workspace Options

Students can choose to complete their projects through ProjectBoard by starting a Student Workspace Template or by downloading a Student Workbook.

Student Workspace Template in ProjectBoard:

- Create a ProjectBoard account
- Select “My Projects” tab
- Select a project type to start.
- Change the title and description
- Press “Save”
- Access your project from the “My Projects” tab.

Student Workbook for download:

- Visit ProjectBoard at <https://projectboard.world/oas>
- Select the “Science Day” tab
- Select “Resources”
- Select “Workbooks”
- Select the Workbook for the type of project you wish to complete.
- Download and print

Teams

Teams can have up to **three students**. Students cannot be separated by more than one grade level in grades 5-8. In grades 9-12, any combination is allowed. If working in a team, each member will need to create their own ProjectBoard account. Then, one member will create the Workspace and/or Submission Project template and add the other team members to the project. All team members must be present for all competitions.

Competition Types

All students can choose to participate in **local** (if your school hosts one) and **Regional Science Day** competitions. View the Regional Science Day Map (located in ProjectBoard) to determine which in person Science Day you will attend. Students may also choose to attend the virtual Regional Science Fair. Those that receive a Superior rating at Regional Science Day will be invited to participate in the virtual State Science Day competition. Students in grades 9-12 may participate in

the in-person Buckeye Science and Engineering Fair (BSEF). BSEF is the qualifying competition for the International Science and Engineering Fair (ISEF). Winning projects from Regional, State, and BSEF competitions will receive awards!

Submitting Projects to Competitions

- Start a **Submission Project** under “My Projects” tab in ProjectBoard.
- Upload the required components under each labeled section (see below).
- Regional Science Day = \$30 registration fee per student.
- Buckeye Science and Engineering Fair = \$50 registration fee per student.
- State Science Day = \$60 registration fee per student.
- Select your project category, Regional Science Day you wish to attend, and fill in remaining questions.

Required Project Components for Competition

To participate in your Regional Science Day competition, you will need to start a **SUBMISSION PROJECT** in **PROJECTBOARD** have the following uploaded to your Submission Project:

1. OAS Consent and Release Agreement Form
 2. ISEF Forms 1, 1A, and 1B (and possibly others depending on the nature of your project)
 3. Abstract
 4. Final Report
 5. Video of Oral Presentation (required for the virtual Regional Science Fair; State Science Day; BSEF)
 6. Digital Quad Chart (required for the virtual Regional Science Fair; State Science Day; BSEF)
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You will bring the following with you on the day of the competition:

7. Project Data Book (print those pages from your Student Workbook or print from your online Student Workspace Template if you recorded data in one of these locations)
8. Final report (printed copy)
9. Project Display - Tri-fold Board or Quad Chart Poster
10. Oral Presentation notecards

OAS Consent and Release Agreement Form

All students and parents must read and agree to the OAS Consent and Release Agreement Form to participate in Science Days.

COPPA (Children's Online Privacy Protection Act)

Parent or classroom teachers of students under 13 must read and agree to the COPPA requirements to participate in Science Days.

Research Plan

All participants must complete a Research Plan **before** beginning their experimentation or prototype testing.

The International Science and Engineering Fair Forms (ISEF)

ISEF forms are available at <https://www.societyforscience.org/isef/forms/>

Procedures of the current year must be used by all students participating in District and State Science Days. Use the ISEF Rules Wizard to determine whether you need additional forms for your project <https://ruleswizard.societyforscience.org/>

Additional ISEF Forms Required

Projects that include:

- human subjects
- non-human vertebrate animals, including observation projects
- potentially hazardous biological agents, including microorganisms, recombinant DNA technologies, human or animal fresh tissues, blood, or body fluids
- controlled substances, alcohol, and tobacco
- hazardous substances or devices, including certain chemicals, equipment, firearms, radioactive substances, and radiation

Abstract

An Abstract of 250 or fewer words is required.

Final Report

A final research report is required including in-text citations and a reference list using MLA or APA-style formatting.

Project Data Book

Document the results of your experiment or prototype testing. Record dates for each entry. The Student Workbook or the online Student Workspace Template can serve as your Project Data Book.

Project Display

Display options for Regional Science Days include a Tri-fold board, Quad Chart Poster, or Digital Quad Chart. Check the Regional Science Day Map (available in ProjectBoard). State Science Day and the Buckeye Science and Engineering Fair require a Digital Quad Chart.

Oral Presentation

Students will give a brief presentation summarizing their project and may use notecards to assist with their presentation.

Where Can I Find All Science Day Project Resources?

- Visit ProjectBoard at <https://projectboard.world/oas>
- Select the “Science Day” tab
- Select “Resources”
- Direct Link: <https://projectboard.world/oas/sciencedayresources>

Resources Checklist:

- 2024-2025 Project Timeline
- Science Day Standards document
- OAS Consent and Release Agreement Form
- ISEF Forms 1, 1A, & 1B (possibly others)
- Research Plan template for either Hypothesis Based Research/Meta Analysis projects **OR** Engineering Design projects
- Final Report Template for either Hypothesis Based Research/Meta Analysis projects **OR** Engineering Design projects
- Abstract Template
- Quad Chart Template and/or the Tri-Fold Board Instructions
- Photo/Graphics Source ID Form
- Regional Science Day Map
- Judging Card

Scientific fraud and misconduct are not condoned at any level of research or competition. Such practices include plagiarism, forgery, use or presentation of other researcher’s work as one’s own, and fabrication of data. Fraudulent projects will fail to qualify for competition in affiliated fairs or the ISEF.