

Science Fair Experiment Timeline

Task 1: Choose a Topic & Develop a Research Question**

Due_____

Goal: Select a science topic that interests you and is appropriate for ISEF rules.

Steps:

- Brainstorm ideas for your experiment. Think about your hobbies or subjects you are curious about.
- Research potential topics and narrow down your ideas.
- Develop a research question (what you want to investigate or solve).
- **Reminder:** Make sure your project adheres to ISEF rules, especially if it involves human participants, animals, or hazardous materials.

Task 2: Conduct Background Research, Form Hypothesis, & Review ISEF/SSEF Guidelines** Due_____

Goal: Learn more about your topic, make an educated guess, and ensure your project complies with SSEF/ISEF rules.

Steps:

- Conduct background research using books, articles, or online resources.
- Take notes on important concepts and similar experiments.
- Write your hypothesis: What do you think will happen during the experiment?
- **Review SSEF/ISEF Guidelines:** Familiarize yourself with ISEF rules and regulations. Pay special attention to the requirements if your project involves human subjects, animals, hazardous materials, etc.
- **Obtain Necessary Approvals:** If your project requires special approval (e.g., from an Institutional Review Board (IRB) or Scientific Review Committee (SRC)), start this process now.

Task 3: Complete ISEF Paperwork & Finalize Experiment Plan** Due_____

Goal: Ensure all necessary ISEF paperwork is completed and your experiment is ready to be conducted.

Steps:

- Complete all necessary SSEF/ ISEF forms based on your project type. This may include:
 - **Form 1:** Checklist for Adult Sponsor
 - **Form 1A:** Student Checklist
 - **Form 1B:** Approval Form

- Additional forms based on the nature of your project.
- **Submit for Approval:** Submit the completed forms to the appropriate review boards (IRB, SRC, or others) and wait for approval before proceeding with the experiment.
- While waiting for approval, continue to refine your experiment's step-by-step procedure, identify your variables, and make a materials list.

Task 4: Receive ISEF Approval & Gather Materials**

DUE _____

Goal: *Finalize approval and gather what you need to start the experiment.*

Steps:

- **Receive Approval:** Ensure you have all necessary permissions and approvals from the IRB or SRC before beginning the experiment.
- Gather all materials and tools needed for the experiment.
- Double-check that your procedure is well-documented and clear.

Task 5: Conduct the Experiment** DUE _____

Goal: *Perform your experiment and collect data.*

Steps:

- Follow the procedure you wrote out, step by step.
- Record your observations and data accurately.
- Conduct multiple trials if necessary to ensure valid results.

Task 6: Analyze Data & Draw Conclusions**

Goal: *Understand your results and make conclusions.*

Steps:

- Organize your data into charts, graphs, or tables.
- Analyze patterns and trends in your data.
- Write your conclusion: Was your hypothesis supported or not? What did you learn?

Task 7: Create a Display Board & Final Report**

Goal: Present your experiment in an organized and visually appealing way.

Steps:

- Review the rules for building your display.
- Create a display board: Include your title, hypothesis, materials, procedures, data (graphs/charts), and conclusion.
- Write a final report summarizing the experiment (including background research, methodology, and results).
- Proofread everything for spelling and grammar.

Task 8: Prepare for Presentation**

Due _____

Goal:** Be ready to present your project confidently.

Steps:

- Practice explaining your experiment clearly and concisely.
- Anticipate possible questions and think about how you will answer them.
- Rehearse in front of family or friends for feedback.

Task 9 Science Fair Day!**

Due _____

Goal: Present your project to the judges and your classmates.

Steps:

- Set up your display board.
- Be confident and ready to answer questions about your project.
- Enjoy the experience of sharing your scientific findings!

Citation:

Timeline generated by chatGPT using the prompts:

- (1) Create a timeline for a teacher to give to a student for completing a science fair experiment AND
- (2) That is a good start. Can you include completing ISEF paperwork prior to experimentation?