STEPS, PHASES, & COMPONENTS

Participating in the Science Fair includes 4 big steps to participate in a Fair, 4 phases of project work, and 5 required components. Use this guide to navigate how these steps overlap and keep track of your progress.

4 STEPS TO PARTICIPATE

Step 1: Planning

Make sure you know deadlines, fair dates, rules and policies.

This is bigger picture planning than Phase 2: Plan.
Call this one 'Getting your ducks in a row.'

Step 2: Submission

Once your paperwork is drafted you'll need to submit for approval.

All projects need teacher approval. Some projects need pre-approval from the Statewide Scientific Review Committee (SRC) before experimentation starts.

Step 3: Project Work

Once you have approval, you can move ahead with your work. Remember to keep organized, keep using your project notebook, and stay resilient. Your project may not work out as you expected.

Revise as needed.

Step 4: Fair Prep

If it's a school fair, regional fair, state fair or beyond – this is when you get ready for showcasing your work.

Know dates and deadlines so you're ready to go!

MSEF

Massachusetts Science + Engineering Fair

4 PROJECT PHASES

Phase 1: Observe

This is the step where ideas are built based on observations of the world around you - and background research.

Ask questions. Get curious.

Phase 2: Plan

This is the step of your project where you plan out your project- including the steps you'll follow, the materials you'll need, and the safety precautions you'll take.

5 REQUIRED COMPONENTS

Project Notebook:

Start your project notebook early in your science fair work to record what you are doing and when (with dates!)

Think of this as a journal.

Research Plan:

Use the research plan as your template as you plan. Your research plan will be submitted for approval and will guide your work.

Be specific and thorough.



At this point you will pause until you receive approval. Plan ahead so you aren't rushed.

Phase 3: Explore

This is the same as the Project Work phase on the left.

While you do the work, use templates for the 3 components on the right to organize your ideas and results as you go.

Phase 4: Explain

This is where you finalize the three components on the left so you can tell the story of your project.

Analyze your results, represent them visually, and be ready to talk about what you could have done differently. The next 3 components are what you need at the fair. You can work on them at the same timethey have parts that overlap.

Project Report:

Also called lab report, project paper, or research paper. This is your written account of your project. Keep it simple and well organized.

Project Display:

This is the visual story of your project- usually a tri-fold board. Use graphs, photos, and captions.

Oral Presentation:

This is the story of your project you share with judges. Include a 5–10 minute presentation plus Q&A. Practice!