

# The Murray Avenue



## Handbook

### **What is the Science Fair?**

The Science Fair is a fun, exciting event where you and other third, fourth, and fifth graders get a chance to display the results of your own science projects. You can work alone or in a group of 2, 3 or 4 students.

### **What is a Science Project?**

A science project can be an experiment, collection, model or report about a topic or question in science that you find interesting. Keep in mind that experiments and demonstrations need to be done in advance and then displayed at the Fair using photos or descriptions.

### **How do you do a Science Project?**

This Handbook will help you learn how to do a Science Fair Project. Follow the simple, step-by-step directions on the following pages.

### **When should you do it?**

Although you have approximately 6 weeks to complete your project, it doesn't have to take a lot of time. Check the schedule on the following page and you plan your time wisely.

## **IMPORTANT RESTRICTIONS!**

**Please remember for the safety of all participants and overall success of the Science Fair, the following rules must be adhered to:**

- Nothing messy can be used at the Fair (e.g. no exploding volcanoes).
- No live animals permitted at the Science Fair.
- No FOOD items may be handed out as part of the project, or as a thank you for visiting the project.
- No harsh or dangerous chemicals allowed.
- No oversized projects. All projects must fit within the provided table space in front of the display board. We cannot accommodate any projects beyond the allotted space or outside of the gym.

***ALL PROJECTS ARE SUBJECT TO APPROVAL  
BY THE SCIENCE FAIR COMMITTEE***

## The Role of Parents in the Murray Avenue Science Fair

Your main role is to offer encouragement, guidance and support to your child. Try to keep the whole process enjoyable and positive.

Here are some specific ways you can feel good about helping your child:

- Encourage your child to begin right away to think about the Science Fair. Start by reading The Science Fair Handbook together.
- Help your child decide whether to work alone or with a friend. Some families find it easier just to work with their child. Others find their kids take more initiative when they work with a friend or two.
- If your child is having a hard time deciding on a project idea, here are a few helpful hints:

Check out the Science Fair Resource Area in the Murray Library. There are books on display with lots of project ideas.

Surf the web. Some great sites that may spark an idea are:

[www.sciencebuddies.org](http://www.sciencebuddies.org)  
[www.education.com/science-fair/](http://www.education.com/science-fair/)

- Draw on your child's own talents and interests. A pianist did a project one year on how a piano makes sounds. Two Little Leaguers did an experiment testing the effect of different bats on hitting baseballs.
- Help your child transport the project to school on the day before the Science Fair between 3pm and 4pm and back home right after the Fair, at 7:30pm.
- Mark your calendar for the night of the Science Fair and be there!
- Walk around and ask other kids about their projects. You can learn a lot and at the same time make them feel great!
- Contact the Science Fair Committee if you have any questions at [MurrayAvenueScienceFair@gmail.com](mailto:MurrayAvenueScienceFair@gmail.com).

# HOW TO DO A SCIENCE PROJECT

**Step 1:** Think about the type of project you want to do. There are five main types of projects:

- 1) **COLLECTION** - a group of similar things such as insects or leaves organized and displayed in an interesting way
- 2) **MODEL** - a representation of something such as a heart, a car, or a dinosaur. (This could be something you make out of clay, paper mache, cardboard, or draw. No store-bought kits, please)
- 3) **REPORT** - a written summary of information about a science topic, usually with pictures or diagrams
- 4) **EXPERIMENT** - a test carried out to learn something new about a science topic. (Take photos of your experiment!)
- 5) **DEMONSTRATION** - a physical display explaining or showing something about a science topic. (Note: nothing messy may be brought to or experimented with at the Fair itself.)

**Step 2:** Choose an area of science that interests you.

What would you like to learn more about? What question would you like to answer?

There are lots of great ideas in the Science Fair section of the Murray Library and on the web.

[www.sciencebuddies.org](http://www.sciencebuddies.org)

[www.education.com/science-fair/](http://www.education.com/science-fair/)



**Step 4:** Collect information to help answer your question.

Visit your school library or your local library for resource books, magazines, websites or encyclopedias. Check some of the websites recommended in this Handbook or in the Science Fair Resource Center at the Murray Library. You can even speak with an expert in the field of your topic.

**Step 5:** Fill out the [Science Fair Sign Up](#)

**Step 6:** Plan and carry out your science project, following the scientific method. The scientific method is the process all scientists use to investigate science questions. It involves identifying a problem, learning what is already known about that problem, thinking of a solution or answer (called a hypothesis), doing an experiment to test your hypothesis, and reaching a conclusion based on what you learned.

**Step 7:** Display your project with pride.

For the Science Fair you will need to display your project so that all visitors will be able to easily view your work. You can write directly on the boards, or attach print-outs of your report, photos and drawings. You can use the table space in front of your display board for any models, demonstrations, experiments, etc. (Please remember, oversized projects are not allowed).

**Step 8:** Practice telling people about your project.

How did you get the idea? What was the hardest part? What was the coolest thing you learned? At the Science Fair, people will be interested in your project—so be ready to show what you know!

**Step 9:** Take your science project to school and set it up the day before the Fair.

**Step 10:** At the Fair, tell visitors about your project.

**Step 11:** Have fun!