Science Fair 2025

Dear Families and Students of 2nd Grade,

Hello everyone!! Great news! Our 2nd graders are invited to participate in the P.S. 173 Science Fair whose theme is "Helping Our Community". Three of these created science projects will be spotlighted and then one will be sent to the district office for the **District #26 Science Fair Expo**. This exciting event encourages students to think like young scientists and engineers. During the month of February and start of March your child will be designing a science project of their choice from home. Participation is highly encouraged but not mandatory.

This year, students are encouraged to create an engineering design project that addresses a problem or issue in the community or real world. They will then create a model or "prototype" that can possibly create a solution. All projects must follow the use of the science and engineering practices. You can refer to the back of this letter or a quick google search online will give you a lot of interesting ideas! The focus being that this project will in some way improve life in the community.

Please encourage your child to choose something that is of interest to them that they will want to complete. You can help them acquire the materials they will need. Guide your child whenever and wherever you can, but have the children reflect their individual thoughts and ideas. Please encourage your child to do most of the work. We know the best way to learn is by doing. Your student project must be a partnership with at least one other student for groups of 2-4 students for each project. What a great way to socialize and learn at the same time!!

The end result should be in the form of an experiment or model along with a trifold board or poster. The data found should be analyzed and included in their project. Also, a final explanation of how this solution would solve the original problem should be included. Final projects will be collected the week of March 3rd-7th for the March 18th school event.

We look forward to your participation in our upcoming Science Fair. Let's work together so that it will be an exciting and memorable experience for our 2nd graders!. Thank you in advance for your support in making P.S. 173's Science Fair a success! Please reach out if you have any questions or need more information.

Best,
Ms. Schier
www.schierscience173.com

Example Science Fair Topics for 2nd Grade

1. Design something that will prevent eggs from breaking in their containers.
1. Can I design something so shoes stay together in a pair?
2. Can I design a house that a strong wind can't blow down?
3. Can I design a floatation device to help keep kids safe?
4. Can I make a windmill that spins creating wind energy?
5. Design a new body covering for an animals
6. Can I design something that can spin? How can this help others?
7. Can I design something with wheels that moves? How can this help the community?
8. Engineer an animal's survival (see examples)
    a. A giraffe hurt its neck and can no longer reach the food. Can you help fix its neck and build a space for it to live while it heals?
    b. A dolphin hurt its tail and cannot swim. Can you help fix its tail and build a space for it to live while it heals?
    c. A porcupine lost its quills and cannot protect itself against predators. Can you help fix its quills and build a space for it to live while it heals?
    d. A butterfly's wing was hurt. Can you fix its wing and build a space for it to live while it heals?

More About The Engineering Design Process

The engineering design process involves the following steps:

1. **Define the problem**: Identify the problem, who it's for, and why it's important to solve

2. Research: Gather information and resources about the problem, including existing solutions and constraints

3. Brainstorm solutions: Come up with as many solutions as possible

4. Choose a solution: Select the best solution from the list of possible solutions

5.Develop and design: Create a plan for how to implement the chosen solution

6. Build a prototype: Create a model of the solution that can be tested

7. Test and evaluate the prototype: Conduct tests to evaluate the prototype's performance, functionality, and safety

8. Communicate findings: Share the results of the tests and evaluations, and identify any issues or improvements that need to be made

You may want to include the following:

- A "catchy" title that will grab attention
- Photographs/illustrations/color
- Graphs and charts
- Background information (history)
- What this project can be used for (Community Connection)