**St. Edward School Science Fair**

Dear Parents,

Our school will be having a Science Fair! This will be an exciting experience for your child and a busy next few months! We realize that this is a new experience for many of the students and we want you to know that we will be working with you every step of the way to keep them on track and to help them succeed!

Although students receive help at school from teachers, parent support and assistance are essential to your child’s success. A general rule of thumb to go by is:

* 4th and 5th graders should be doing almost the entire science project by themselves
* 6th – 8th graders should be doing the ENTIRE science project by themselves

We are confident the following benefits will result from your child’s participation in the Science Fair:

* Reinforcement of grade level science, literacy and math skills
* Fostering curiosity, awareness and creativity
* Increased scientific knowledge
* Learning research techniques
* Growth in ability to work independently
* Having fun with science!

In addition to the opportunity to work on a project, the Science Fair provides students with an increased awareness of science and an opportunity for them to develop positive attitudes about themselves and their work. The science project allows children to use critical thinking and problem solving skills learned in science and math.

Attached is a Science Fair **Project Selection Form**. Please complete the form with your child and have your child return it to us by the date listed at the top of the form.

Thank you for continued support and enthusiasm!

Please feel free to contact us at any time with questions, comments or concerns.

~Mrs. Malinowski & Ms. Holzner

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**St. Edward School Science Fair**

**Project Selection Form**

Please return this form to your teacher by \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Student’s first and last name (printed) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Grade \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Room # \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\*Parent/Guardian’s signature \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

My Science Fair project problem/question: (choose 3 possibilities)

1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

My project will be (please check one):

€ **EXPERIMENT** (4th – 8th Grades) – you will conduct an experiment to find the answer to your question/problem. Using the *Scientific Method* will take you through the correct process of asking a question, doing some preliminary research, making a hypothesis, planning and conducting your experiment and analyzing your results.

€ **DESIGN PROJECT** (4th – 8th Grades) – You will use science, math and creativity to dream up and design an object or process to solve a real life problem. Using the *Design Process* will take you through all the necessary steps of defining a real world need/problem, performing preliminary research, establishing design criteria, building a prototype, testing your design and analyzing the results.

|  |  |
| --- | --- |
| **Scientific Method** | **Design Process** |
| Identify and write a testable question | Define a need or real world problem |
| Perform background research | Perform background research |
| Formulate a hypothesis and identify variable | Establish design criteria |
| Design an experiment, establish procedure | Prepare preliminary design(s) |
| Test the hypothesis by conducting the experiment | Build and test a prototype |
| Modify as needed and perform replicates | Test and redesign as necessary |
| Analyze the results and draw a conclusion | Analyze the design(s) and draw an conclusion(s) |
| Present results | Present results |

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**Helpful Hints for Parents**

Welcome to the Science Fair!

This should be a fun project! Success is when your child asks their own question, completes their project with a smile and knows more than when they started. Enjoy this time of discovery and fun for you and your child!

* The science fair project reinforces reading, writing, logic and math skills and creativity
* The goal is that your child learns “the scientific method” or the “design process” through direct experience
* For their daily reading, recommend they choose a science book that can be a research resource for their project
* A REPORT is part of the process.
* Reports for 4th graders may be typed or hand-written
* Reports for 5th – 8th grade MUST be typed
* If your child needs help typing their report, type the report *as your child wrote it or dictated it to you*. If the sentence structure is off, ask them if it needs correction. **Guide** them to the correction.
* Use their words; children say things in unique and fun ways!
* It is best to guide and answer their questions with questions. You may know the answer, but help them discover it themselves. For example, you may want to show them which paragraph in the book to re-read rather than giving them the answer.
* Encourage your child’s artistic side with the display.
* If you allow your child to use websites for research, verify the site is “correct” and then let them use the research found there. Remember:
* Anyone can create a website; this does not mean the information is correct!
* Make sure the website is run by a large, recognized group such as a college or organization
* DOT “org,” “gov” or “edu” are generally trustworthy for accuracy of content
* What is an acceptable science fair project?
* Something that answers a question to which they do not know the answer
* Something they can figure out themselves
* Something they can change somehow, add another variable and then predict the outcome. That’s an experiment!
* What is NOT an acceptable project?
* Reproducing results found on the web is NOT an experiment…it is a reproduction
* A demonstration is not an experiment (i.e., volcano)