

F.H.C.S. Public Montessori Schools

Dear Students and Parents:

It's time to start work on our school's **Science Fair!** Save the Date for February 8th, 2017, 6:00-7:00 p.m. Each individual student in grades 2nd and 3rd is responsible to display a project in the science fair. (No group or partner projects)

The primary objective of this project is to have students approach a problem scientifically. This includes:

1. Asking questions and forming hypotheses
2. Creating experiments to test those hypotheses
3. Organizing data and drawing conclusions

Science Fair Display Guidelines

Displays can be made of any material, but must be sturdy enough to stand alone on a table. The materials should be easy to work with and easy to transport. Suggested materials are: a cardboard or wooden box, cardboard, or blank science fair display board. Panels should be hinged together or taped with strong tape.

Many other displays will surround your project; so it should be attractive and have eye appeal. Remember the "C's" for exhibiting:

- * Color appeal
- * Contrast
- * Clear, concise statements
- * Completeness

Prepare a background, which is a pleasing color (paint or cover with paper) and use contrasting lettering (lettering can be done by hand or by using stencils, or may be stick-on or glue-on letters).

Your exhibit should tell the story of your project. Include the Question, Hypothesis, Materials, Method, Results, and Conclusions using simple statements and attractive visuals. Your display must have (A) pictures or sketches AND (B) a properly labeled graph of your data.

MAKE SURE YOUR NAME IS ON THE BACK OF YOUR DISPLAY.

Your Science Fair Project should fit into one of the following categories.

1. Biological Sciences:

- * Includes projects that involve living things or once living things
- * Examples of projects in this category are studies of plant growth, cell structure, molds, preservatives, growth and development

2. Environmental Sciences/Ecology:

- * Includes projects that involve the environment and the relationships of living things to each other and/or to the environment
- * Examples of projects in this category are studies of organisms in their habitat, relationships between various organisms, and studies on how people's actions affect the environment

3. Physical Sciences:

- * Includes projects involving non-living things
- * Math, computer, and engineering projects are included in this category
- * Other topics in this category are aerodynamics, probability, crystal growth, evaporation, solar power, and

electrical circuits

4. Behavioral/Social/Health Sciences:

- * Includes projects related to health, psychology, or consumer/product testing
- * Examples would be perception studies, aptitude and attitude surveys, product comparisons, and various exercise studies

The Basic 5 Steps of a Science Project

1. Problem: Ask a question which can be answered by observation and/or experimentation.
2. Hypothesis: State your hypothesis. Students will predict what the outcome will be based on the students' experiences and/or information collected from available resources.
3. Procedure:
 1. Material: List every item, which is needed to do the experiment. Include equipment as well as materials.
 2. Method: List a step-by-step sequence of exactly what is done.
4. Results: Display a complete record of your observations and/or results. Note any accidents, mistakes, unusual or unexpected observations and additional information which surfaces. Use graphs and/or charts to present your data.
5. Conclusion: Using the data from your results, answer the question asked in Part 1. Then, note any additional comments, explanations of why the results did or did not match your hypothesis.

We look forward to seeing all the wonderful experiments/projects.

Thank you,

Ms. Amy ☺