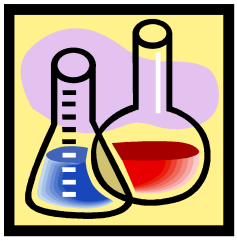


Thank you for your interest in the Dickinson Avenue Elementary School Science Fair!

We we look forward to your child's participation in Dickinson's Annual Science Fair to be held on March 22, 2016. All students in grades K – 5 are invited and encouraged to participate. The science fair is mandatory for students in grade 4. This is a wonderful opportunity for your child to explore scientific topics, make discoveries, and share and display projects. Please visit our school's science fair website at:

http://moodle.northport.k12.ny.us/course/view.php?id=5513#section-0

This site provides several resources to support you child in preparing a science fair project, and all forms can be downloaded.

The following steps are all you need to do to participate:

1. **Register** by submitting the registration form on the next page of this packet to your child's teacher.
2. When registered, students will receive a science fair board and project summary form. Completed project summary forms will be attached to the back of the science fair board.
3. Read and follow the *Rules and Information* Packet that follows.
4. Set up your display in the APR prior to the science fair.

The science fair advisor, Mr. Comiskey, can be reached at 631-486-7201 or matthew.comiskey@northport.k12.ny.us with any questions.

Science Fair Registration Form

DUE NO LATER THAN

WEDNESDAY, MARCH 1, 2017

PLEASE RETURN THIS FORM TO YOUR TEACHER

ONLY STUDENTS WHO REGISTER ON TIME WILL BE PERMITTED TO PARTICIPATE IN THE SCIENCE FAIR

Student name _____ Grade level _____

Teacher _____

Title:
(written as a question)

Hypothesis:
(I think…. will happen when …)

Brief Description of Project

***** All parents must sign and approve their child's Science Fair Project. *****

I acknowledge that I have received and reviewed the materials for the Science Fair and I am aware the requirements and timeline. I have approved and given permission for my child _____ to participate in this year's science fair.

Student's Signature _____ Date _____

Parent or Guardian Signature _____ Date _____

Teacher's Approval of Project ☐

Teacher's Signature _____ Date _____

SCIENCE FAIR TIME LINE
2017

January	**Science Fair Letters Sent Home** ***See Dickinson Avenue website or Moodle page for more information and details.***
January 10	**Science Fair Parent Information Session-** ***William J. Brosnan Building 7:00pm***
March 1	**Science Fair Registration Forms due anytime before March 1-** ***When registered, students will receive science fair board and project summary forms.***
March 21	**Bring your completed science project to school between the hours of 2:30-3:15 PM.**
March 22	**Judging of science exhibits and Class viewing of projects-all day; Projects will be on display for parent viewing from 2:25- 3:00 PM and 6:00 to 8:00 PM; Projects may be taken home at the end of the viewing time.**
March 23	**All projects must be taken home by 10 am.**
May 6	**Brookhaven National Laboratory Science Fair**

RULES AND INFORMATION PACKET

2017 Dickinson Avenue Elementary School Science Fair

IMPORTANT DATES:

- ➢ Project setup is on Tuesday, March 21st in the All Purpose Room. Projects may be delivered between 2:30 and 3:15 PM.
- ➢ Families are invited to view projects in the evening on Wednesday, March 22, from 6:00 to 8:00 PM.
- ➢ Students should take projects home after the evening viewing. If you are unable to attend the evening viewing, arrangements should be made to pick up your project Thursday morning, March 23 before 10:00 AM.

Please see the attached **BNL Judges' Rubric** for criteria that will be used in judging the Dickinson Avenue Elementary School Science Fair projects. In addition, the district-wide feedback form will be used to provide feedback to each participant. The scientific method is a pattern of inquiry that forms a structure for advancing scientific understanding: *identify a problem*, *form a hypothesis*, *design and conduct an experiment*, *collect data*, *analyze results*, and *form a conclusion*. Scientists using this approach have answered questions ranging from the simplest to the most complex.

BROOKHAVEN NATIONAL LABORATORY

First place grade-level winners in grades K-5 who also meet eligibility requirements will be invited to participate in the BNL Elementary School Science Fair to be held on **Saturday, May 6th.**

Brookhaven National Laboratory Elementary School Science Fair Eligibility Requirements:

- Suffolk County school students in grades K–6 who are grade level winners
- Only individual projects are acceptable for grades 4–6.
- Individual or group projects are acceptable for grades K–3. Participants of group projects must be of the same grade level. Size of group project is limited to one class (am and pm kindergarten taught by same teacher is considered one class).
- Each project must include a completed *Summary of Project* form prominently displayed on the project. This form must be signed on the reverse by a school official (teacher, principal, or science coordinator) who will interview the student and certify that the student completed the work and has a thorough understanding of the project. Children who will be entering Brookhaven National Laboratory's Science Fair will receive a letter with instructions. At that time, children should bring their *Summary of Project* form to your science fair coordinator to be signed. This form does NOT need to be completed for the school science fair. **Only winners who will go to Brookhaven need to complete it.**

**Also visit Brookhaven National Laboratory's website for FAQs, previous winners, project ideas, a short video clip, etc. www.bnl.gov/education/contests/sciencefair

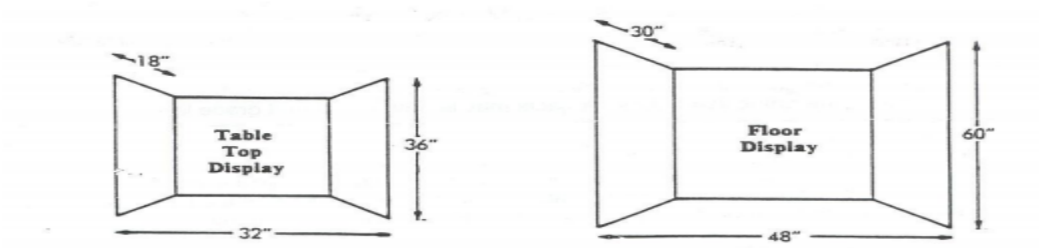
2017
Elementary School Science Fair

PROJECT REQUIREMENTS:

1. Each project must include a completed **Project Summary Form** prominently displayed with the project. This sheet will be provided to the student along with a display board after turning in an application form. Please do not write your name on this paper. A student identification number will be assigned and placed on the Project Summary Form and display board.

2. Projects must follow the scientific method.

3. Size of project display:



4. Students will not be present during judging. Any project having moving parts must either run continuously or have a "start" mechanism that can be easily activated by a judge.

5. The school will not provide facilities or outlets for electricity, running water, or drainage. Dangerous chemicals, open flames and explosives may not be exhibited. All projects must be durable and safe. Moveable parts must be firmly attached.

6. Any project deemed to be unsafe or inhumane in any way will not be displayed at the Science Fair and will not be judged. Live animals cannot be exhibited at the Science Fair, but photographs are acceptable.

7. *The project must clearly reflect the students' own efforts*. If adult support is given, it should be acknowledged in the credits.

Winning Suggestions for Your Science Fair Project

Winning science fair projects typically have several things in common and incorporate the following suggestions.

Display
A visible title is an absolute must – otherwise you risk being lost in the crowd. Make it big, and make sure it is at the top and center of your display. Use color, but make sure it is readable above all else.

1. If you have the opportunity to place some of your experiment in front of your display, do it. It will add to your presentation and give it a tangible feel.
2. Be sure to place your report or journal in a visible, easy to reach spot so viewers can pick it up and read through it.
3. Make sure everything in your display is neat, organized and clean.

Originality
More and more often people are looking for creative and original ideas. A creative twist on a pre-built project is better than just testing something "off the shelf". Perhaps take the research one step further than required, add an additional experimental test, and so on. If you have the time, spend a few days brainstorming ways to make your project original. You may surprise yourself.

Journal
In addition to making a display, many people who make good science fair projects keep project logs in which they record anything of note during the project's life-time. This is considered good practice for any scientist – including ones that are working in labs and industry! So this is a good habit to cultivate. Think of it as a personal journal but focused only on the details of your science project.

**If you kept one (and kept it relatively neat), you can place it next to your report – viewers often look very favorably on participants that keep these journals and will sometimes spend extra time looking for what reflections you have made about your project. People love hearing about these stories – it gives them a better 'feel' for what kind of scientist you are becoming.

Credit
Good science fair projects are rarely done by one person, alone, and without help. If you received help (from parents, friends, cousins, etc.) be sure to note who helped you and how in your report, and mention them in your notes. Scientists often recognize those who have helped make contributions to their project – even just a little help – so be sure to give credit where it is due. Viewers will appreciate your honesty, and are sure to see you in a more positive light.

To get started searching for ideas for Science Fair Projects, here are some useful websites. If you are interested in having your project eligible for the Brookhaven Science Fair, please be sure to review the contest information included on the Brookhaven website.

Brookhaven Science Fair Web Site:
www.bnl.gov/education/contests/sciencefair

Science Fair Information Links for Students, Parents & Teachers

- Science Buddies http://www.sciencebuddies.org/
- Science fair project ideas http://www.education.com/science-fair/
- Science Fair Central http://school.discoveryeducation.com/sciencefaircentral/?pID=fair
- Science Fair Adventure http://www.sciencefairadventure.com/
- Science Bob http://www.sciencebob.com/index.php
- Science Fair Project Resource Guide http://www.ipl.org/div/projectguide/choosingatopic.html
- All Science Fair Projects http://www.all-science-fair-projects.com/
- Science Kids http://www.sciencekids.co.nz/projects.html
- Science Made Simple http://www.sciencemadesimple.com/projects.html
- Science Fair Projects by Branches of Science http://www.juliantrubin.com/branchesofsciencefair.html
- Energy Quest – Science Projects http://www.energyquest.ca.gov/projects/index.html
- Intel – Student Science https://student.societyforscience.org/sciencenews-students
- Try Science – Sample Science Experiments http://www.tryscience.org/
- Little Shop of Physics http://littleshop.physics.colostate.edu/onlineexperiments.htm
- PBS Kids Science Fair http://pbskids.org/dragonflytv/scifair/
- Testable Questions http://teacherweb.com/GA/BeaverRidgeES/Head/testable-questions.pdf

- Science Buddies Project Guide
  http://www.sciencebuddies.org/science-fair-projects/project_question.shtml

- Science Powerpoint & Intro to Science Questions
  http://www.slideshare.net/emteacher/science-questions

- BrainpopJr & Science Project Video
  https://jr.brainpop.com/science/scienceskills/scienceprojects/zoom.weml

- 5 Fun Science Experiments for Kids (w/ Grover!)
  https://www.youtube.com/watch?v=BeLT-O8Mz2M

- The Scientific Rap Song
  https://www.youtube.com/watch?v=bUa-ilQqEv0

- The Scientific Method Song
  http://www.havefunteaching.com/songs/science-songs/scientific-method-song

BROOKHAVEN
NATIONAL LABORATORY

JUDGES' RUBRIC
BNL Elementary School Science Fair

Criteria	4	3	2	1
Originality of Question	Original research.	Unique perspective on a traditional project.	Embellish an existing idea.	No originality.
Hypothesis	Thoroughly developed with "I think…because…."	Sufficiently developed.	Partially developed.	Major flaws.
Procedures/ Organization	Easy to follow sequence of the Scientific Method. Dated sequence of entire process captured by the student in a log or journal. This includes all observations, data collection, and changes to project.	Easy to follow sequence of the Scientific Method. Dated sequence of entire process captured by the student in a log or journal with moderate detail.	Somewhat difficult to follow because of lapses of the sequence of the Scientific Method. Minimal documentation included in a log or journal.	Difficult to follow; no sequence of the Scientific Method. No data collection shown.
Investigation Trials	Experiment was performed more than 2 times and/or sample size was exceptional.	Experiment was performed 2 times and/or sample size was adequate.	Experiment was performed 1 time and/or sample size was minimal.	Experiment was performed incompletely.
Analysis	Data is clearly presented and directly relates to hypothesis/ question.	Data is reasonably presented and shows good relationship to hypothesis/ question.	Data is minimally presented and shows some relationship to hypothesis/ question.	Data is not presented and no relationship to hypothesis/question is evident.
Evaluation/ Conclusion	A logical conclusion has been drawn from the data collected, and answers the hypothesis/question and/or raises a new hypothesis/ question. Has real world application.	A logical conclusion has been drawn from the data collected.	A fairly reasonable conclusion has been drawn from the data collected.	The conclusion drawn is not shown to relate to the data collected.
Presentation *(Overall Impression)*				

*Scientific Method: question, hypothesis, investigation/testing, analysis, and evaluation/conclusion.