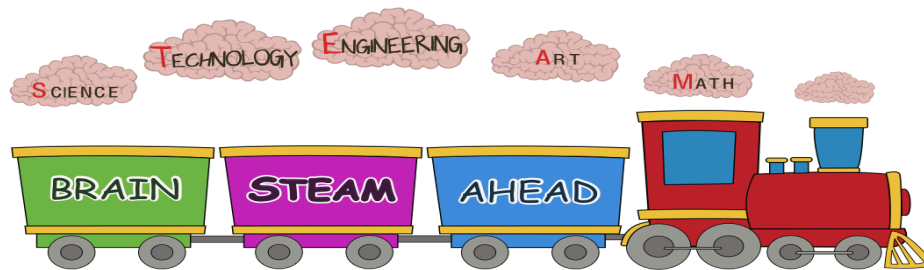**Nassau County Math Teachers Association**
and
Nassau County Association of Math Supervisors
Present
The Sandy Cohen

BRAIN STEAM AHEAD Day

A Day of FUN Activities
For Parents and Children Grades K-6

Saturday, March 10, 2018

From 8:45 – 11:45

Rushmore Avenue School

251 Rushmore Avenue

Carle Place, New York

Investigate and play with **Science, Technology, Engineering, Art and MATH.** Discover how to use math as a tool everyday in many ways as you BRAIN STEAM Ahead! Build a bridge, design a tower, make a kaleidoscope, become a bubbleologist, fly a paper plane, blast off paper rockets, engineer a toothpick design and many other exciting **STEAM** topics will be available for you to explore.

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BRAIN STEAM AHEAD DAY
Inspired by the vision of Sandy Cohen
March 10, 2018

INSTRUCTIONS FOR PARTICIPATING FAMILIES

Please read all information carefully to ensure you and your child get the most out of this day.

Brain Steam Ahead Day will focus on Science, Technology, Engineering, Art and MATH. This event will be held on Saturday, March 10, 2018 at **Rushmore Avenue School in Carle Place**. Doors will open at 8:45. The day will end at 12:00. The goal of Brain Steam Ahead is for students and their families to have fun learning and exploring together.

Self-directed exploration will be the format of the day. Together, you and your child will have the opportunity to explore the activities of your choice as you move from the gymnasium to the cafeteria to the classrooms participating in stations or sessions. **Stations** are continuously flowing, offer hands on materials, and have no time constraints. **Sessions** are more involved, run at specific times, and have time constraints.

When you arrive please pick up your registration materials. Included will be a bag, pencils, name badges, and tickets for a snack and water.

To register please go to http://tinyurl.com/y7jfjc3s

The costs are as follows:
$15.00 for one child and one adult
$5.00 for each additional person
Maximum number of people on one registration is 5.
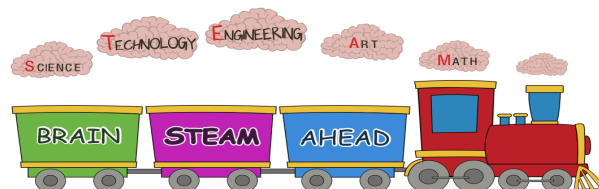Register early to ensure that you don't get closed out!

All children must be accompanied by a responsible adult. Since the activities are not grade specific, families can participate together. The program is designed for children in grades K – 6 ONLY!
NOTE: We cannot accommodate pre-school children, babies, or strollers.

Attached is a copy of the preliminary program. The final program with information about parking will be sent with your confirmation via email on about March 1, 2018. If you do not receive an email or have questions please contact us at brainsteamahead2018@gmail.com.

CANCELLATION POLICY: WE WILL RETURN YOUR REGISTRATION FEE IF YOU NOTIFY US BY FEBRUARY 24, 2018. IN CASE OF INCLEMENT WEATHER PLEASE CHECK YOUR EMAIL FOR EVENT STATUS.

STEAM Stations in the Gym

1. **Binary Code Bracelets and Key Chains**
   Facilitator: Audrey Bellovin, Garden City Schools
   Learn how to translate your initials into Binary Code, and create your own personalized beaded binary bracelet or key chain.

2. **Can You Build the Tallest Structure?**
   Facilitators: Julie O'Brien, Farmingdale Schools and Emily O'Brien, Plainedge Schools
   Test your engineering and design skills to build the tallest structure possible using cups, cubes, and craft sticks.

3. **Clothespins, Binder Clips, and Craft Sticks. Oh My!**
   Facilitators: **Daniella Joyce and Casie Morgan Loyola University**
   Try out some engineering challenges using everyday objects like clips, craft sticks and clothespins. Build the tallest structure using clothespins and sticks. What can you make just using triangles? Let your imagination run wild.

4. **Dazzling Kaleidoscopes**
   Facilitators: Lynn Marie Flynn and Katerina Skiadas. East Williston Schools
   Create your own kaleidoscopes and see all of the colorful patterns that are created from the light.

5. **Fun with Pattern Blocks**
   Facilitator: Mary McElroy, Notre Dame School
   Create designs and learn about shapes with these wonderful blocks.

6. **Index Card Challenge**
    See how tall you can build a freestanding tower using just index cards.

7. **Let's Hear It for Sound!**
   Facilitators: Maura Spar and Robin Carucci, Malverne Schools
   Create your own musical instruments. How is sound created? How can you change the pitch of different instruments?

8. **Fun With Graphing**
   Facilitator: Matt Tetenbaum, Freeport Schools
   Have fun while you sort "spring things" to create your own pictograph, bar graph or line plot!

9. **Marshmallow Fun***
   Facilitators: Julie Santoro and Ellis McMahon, Carle Place Schools
    Create 2D and 3D shapes using marshmallows and toothpicks.

10. **Math and Movement**
    Using floor sized 100's mat and giant dice you will navigate yourself through the board.

    * May contain food

11. **Pi Pandemonium**
    Facilitator: Henry Kuptas, East Williston Schools
    The ancient Greeks knew pi was special, the number 3.14 ... gets its own special day on 3/14, or March 14. Have fun while you learn about this very important number

12. **Robotics – Hands on Learning**
    Facilitators: Donald Schaefer, Carle Place Community Robotics and Lisa Pinataro, Carle Place Schools
    STEM through Robotics – Robot demonstration of student constructed robots. VEX IQ robotics program is for Grades 3 – 6 and VEX REC program is for Grades 7 – 12. Visitors will be allowed to control the sample robots.

13. **Trick Your Eyes**
    Create your own old time toy based on an optical illusion. Watch the bird get inside and outside the cage in seconds!

STEAM Stations in the Cafeteria

14. **Help Save Fred***
    Facilitators: Kristen Hommel and Jenna Oliveri, Carle Place Schools
    This poor gummy worm, named Fred, is stranded on the top of his overturned boat in the middle of a lake. He cannot swim. Without touching Fred, the cup, or the life preserver, can you and your partner *save FRED* using only the four paper clips provided? ... Any *help* would be greatly appreciated.

15. **It's the Last Straw**
    Facilitator: Elizabeth Cotell, Carle Place Schools
    How far will your loop plane fly?

16. **Marble Maze**
    Facilitator: Mary-Jean McCarthy, Adelphi University
    How about a game of pinball? Create your own marble maze game and have some fun.

17. **Make It, Move It**
    Facilitators: Kathy Dallek and Elizabeth Ryan , Garden City Schools
    Can you race your car from one end of the table to the other without touching it? Use your ingenuity and tinker supplies to make your car move without touching it.

18. **More Toys from Trash**
    Facilitator: Catherine Metrick, Garden City Schools
    Create your own moving emoji man.

19. **Penny Spinners**
    Facilitators: Marjorie Monahan and Gina DeSanto, Malverne Schools
    Who isn't fascinated with a spinning top! Create a spinner to learn about colors.

20. **Pi in the Sky**
    Facilitators: Connie Havens and Joe Tortora, South Country Schools
    Use the digits of pi to create your own skyline.
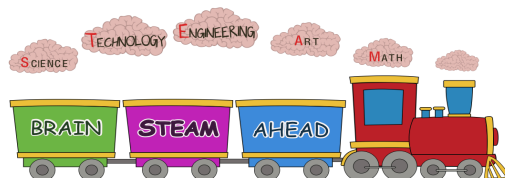
    * May contain food

21. **What is an Icosahedron?**
    Facilitators: Lynette Drexel, Farmingdale Schools and Deanna Weber, Hofstra
    You will find out when you build a 3 dimensional shape with 20 sides!

22. **You Gotta Have Art**
    Facilitator: Laurie Rivlin Caspert, Art Teacher @Gotta Have Art
    Let's turn our imagination on and create cool 2D and 3D with recyclables – a fun art project with shapes

STEAM Classroom Sessions

23. **100 Toothpick Challenge**
    Facilitator: Juanita Maltese, Carle Place Schools Retired
    Build the tallest structure using 100 toothpicks and mini marshmallows.

24. **10 Minutes (or More) of Code**
    Facilitator: Sonja Barrera, Massapequa Schools
    Write some basic computer programs on a calculator and see what it can do.

25. **Bridge Building**
    Facilitators: Kristen Borg and Marissa Ruggiero, Garden City Schools
    Engineer your own bridge using nothing but straws and tape!

26. **Bubbleology***
    Facilitators: Lisa Clark, Sewanaka Central High School District, Lauren Asseleta Oceanside Schools and Alexa Pascarella, Farmingdale Schools
    Are all bubbles spheres? Let's explore!

27. **Can You Escape the Math Room???**
    Facilitator: Loretta Fonseca Roslyn Schools
    Use your skills and knowledge to solve puzzles, break codes, play games and reveal clues. You will have 25 minutes to complete the tasks and get enough information to open up a locked box that holds the key to escape the room! This is open to 6th graders and their adults. A guide will be in the room to give hints (each hint takes a minute off the clock!)
    NOTE: Maximum per session: 12 6th graders. PICK UP TICKETS AT REGISTRATION

28. **How to Make a Pop Up Book POP!**
    Create your own pop-up book.

29. **Mathtastic Yoga**
    Facilitators: Kelsie Cohen RYT, Yoga Alliance and Howard Cohen, Computer Consultant
    You and your child will not only have your mind stimulated but your body and spirit too. With the use of breathing techniques, healing beads, sun salutations, and asanas you will be amazed how much math is a part of yoga.

30. **Math Around the World**
    Facilitator: Alexis Jovel, Hempstead Schools
    Play math games from around the world to build your skills and have fun.

    * May contain food

31. **Math-A-Matics Diner***
    Facilitators: Karen Koppleman and Nancy Golden, Merrick Schools
    We'll feed your mind (and maybe your belly). You'll go home with fun activities to play with your family.

32. **Let's Code Robots!**
    Facilitator: John Chae, Syosset Schools
    Code an mBot robot using the Scratch like drag and drop programming on a tablet. Learn basic movements and how to manipulate sound to create music.

33. **Spaghetti Tower Challenge***
    Facilitators: Christina Cedrone, and Jackie Gardiner Carle Place Schools
    Build a spaghetti design that will support a marshmallow.

34. **Up, Up and Away**
    Create your own glider and test out aerodynamics.

35. **Penny Raft Challenge**
    Facilitators: Michelle Anszelowicz, Wantagh Schools and Elizabeth Cottell, Carle Place Schools
    Test your engineering skills. Construct a raft that can hold as many pennies as possible. You may only use 10 straws, tape, string, or rubber bands

36. **Robotic Fun**
    Facilitators: Julie Norman and Rich Greenberg, Carle Place Schools
    The Finch is a small robot designed to inspire students learning computer code. Write interactive programs with features that include; light, temperature, obstacle sensors, accelerometers, motors, buzzers, and full-color beak LED. The Finch will show you a physical representation of your SCRATCH computer code. Visit this station and challenge a friend in a rocket league style battle in our arena.

37. **Maker Space**
    Facilitator: James Cunningham, Carle Place Schools
    Design and build your own contribution to a future city. Use your imagination along with craft supplies, KNEX building pieces, and Legos to make a building a bridge or some other element of the city of the future.

38. **Lego Robotics**
    Facilitators: Matthew Koppelman and Sam Coleman, Plainview Old Bethpage Schools

39. **The Great Chain Race**
    Challenge yourself to build the longest paper chain from a 12 X 18 piece of paper.
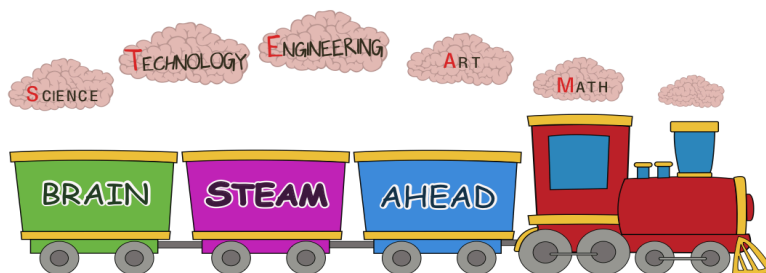
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The Brain Steam Ahead Committee wishes to thank all those who have contributed to make this day possible.
Thank you to all of our facilitators and committee members who unselfishly volunteer their time and talents.

Thank you to the Carle Place School District, especially Superintendent Mr. David Flatley and the Board of Education for hosting this event.
Thank you to principal, Mrs. Catherine Silletti and all staff of the Rushmore Avenue School for their help and support.

BrainSteam Committee

Laura Forsyth Malverne Schools

Jackie Gardiner Carle Place Schools

Gabbie Gizzi Roslyn Schools

Suzanne Golder Malverne Schools

Dorothy Hess Malverne Schools retired

Alexis Jovell Hempstead Schools

Millie Joyce Garden City Schools

Angel Koslowski Syosset Schools

Lucy Landesberg Nassau Community College retired

Caryl Lorandini Carle Place Schools

Joanne Lufrano Valley Stream Schools DIst #30 retired

Juanita Maltese Carle Place Schools Retired

Sue Mehr Deer Park Schools

Lisa Minerva East Williston Schools

Grace Quinlan New Hyde Park Schools retired

Rose Ricca Malverne Schools retired

Laura Spotkov Molloy College

Sherri Winick Plainview Old Bethpage Schools

Fran Wisnewski Molloy College