

Regional / National Program

Implementation Toolkit

REVISED July 1 2010

**PURPOSE:** The purpose of the Kid Zone Conference is to increase students in grades 3-5 interest in Science, Technology, Engineering careers to allow them to excel academically and succeed in High School and college.

# 

# INTRODUCTION TO KID ZONE CONFERENCE

## THE KID ZONE CONFERENCE is a PROGRAM

Kid Zone Conference is a conference specifically targeted toward students in grades 3 through 8. It is designed to help prepare them for academic challenges in the areas of science, technology, engineering and math. It is hoped that through this program the students will gain an interest in these subjects that allows them to excel academically in their current grade level, and pave the way for future successes in secondary and post-secondary education. The activities are designed to enhance the critical thinking skills of the students and to engage them in the scientific process.

## 

## Kid Zone Conference Goals

KZC aims to

* Develop a positive attitude for students towards academic excellence
* Develop a positive attitude towards self
* Stimulate enthusiasm about engineering and science
* Utilize NSBE collegiate and Alumni members as role models

**CONTACTS:**

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The mission of SEEK Camp is "to increase elementary school students' aptitude in math and science and their early interest in pursuing  STEM (science, technology, engineering, math) career fields, by having them engage in interactive, team-based engineering projects.

Seek is funded by a $1 million donation to NSBE from the Battelle Foundation

NSBE, with a membership of more than 25,000, is one of the nation’s largest student-managed organizations. The organization created SEEK to address the under representation of blacks in STEM fields and the underachievement of black students in K–12 classrooms. Only about 5 percent of U.S. students receiving bachelor’s degrees in engineering in recent years have been black, and only about half of black students in many U.S. cities graduate from high school on time.

The three-week SEEK Day Camp takes place during the summer months. It is led by NSBE members — black engineering students dedicated to pursuing professional excellence and giving back to the community. These SEEK mentors will be trained by Society of Automotive Engineers (SAE) representatives and Dr. Grace Carroll of Carroll Consulting. The NSBE Pre-College Initiative (PCI) team developed the SEEK Camp experience using a framework based on SAE International’s “A World in Motion,” an interactive, standards-based curriculum emphasizing student motivation, mentoring, cultural connection and parental involvement.

For more information about SEEK, please visit [www.nsbe.org](http://www.nsbe.org/). Or contact: Franklin Moore, NSBE Pre-College Initiative manager and SEEK Camp manager (703.549.2207, ext. 204, [fmoore@nsbe.org](mailto:fmoore@nsbe.org))

The objective of Kid Zone Tech Bowl is to encourage and showcase Academic Excellence and understanding of the fundamental principles various topics covered in State Achievement Tests. Program participation occurs through healthy competition in a “Jeopardy!” style game show format. Questions cover a wide variety of topics, from NSBE History, Riddles, African American Scientists and Inventors history to general math and science curricula from the State Tests. Each team consists of four (4) 3rd – 5th grade members (including at most one 5th grader) and one alternate, who represent their NSBE Chapter**. *Regional Kid Zone competitions will be held at the Fall Regional Conferences*** and the winning team from each region will compete for the national title at the National Convention.

**ELIGIBILITY:** Each participating team member must be a current, paid NSBE Jr. member, and must represent a chartered student NSBE Jr. chapter. In addition, each team member must submit an official transcript f to NSBE headquarters.

**NATIONAL**  The six regional chapter team winners will represent their respective regions at the

**AWARDS:** National Competition held at the National Convention. Each regional team will receive complimentary registration and a team shirt. In addition, financial support will be provided to each team to assist with travel expenses associated with attending the National Convention. The top three national teams will receive special recognition in our national publication as well as be awarded the following prizes

**First place TBA**

**Second place TBA**

**Third place TBA**

**REGIONAL** Each team member will receive a certificate of participation. Your region will provide

**AWARDS:** awards to the top three regional teams. The type of award for may vary from region to region. Please consult your Regional Alumni PCI Chair for more information.

|  |  |
| --- | --- |
| **2010 Fall Regional Conference (FRC) Schedule** | |
| **Hyatt Regency Rochester, Rochester, NY** | November 11 – 14 |
| **Radisson Green Tree, Pittsburgh, PA** | November 5 – 7 |
| **Sheraton Birmingham, Birmingham, AL** | November 12 – 14 |
| **Indianapolis Marriott East, Indianapolis, IN** | November 19 - 21 |
| **New Orleans Marriott & Convention Center, New Orleans, LA** | November 19 - 21 |
| **Marriott San Mateo, San Mateo, CA** | November 12 - 14 |

**DEADLINE** Region 1 deadline is October 30, 2010

**FOR** Region 2 deadline is October 23, 2010

**LOCAL COMPETITON:** Region 3 deadline is October 30, 2010

Region 4 deadline is November 6, 2010

Region 5 deadline is November 6, 2010

Region 6 deadline is October 30, 2010

**\**All deadlines are two weeks before respective FRC’s.***

**TEAM ENTRY REQUIREMENTS: *MUST COMPLETE ONLINE ENTRY FORM FOUND ON IMPACT BY SEPT. 26, 2010.***

The following link will direct you to various state exam examples <http://www.edinformatics.com/testing/testing.htm> .Students can also obtain practice information from their respective schools. It is the National Alumni Programs Zone’s hope that this will help students not only be better prepare for the Kid Zone competition but will also improve scores on State Aptitude Examinations.

The following list of categories will be used during the Tech Bowl competition. They also correspond to sections on the practice exams. Please note that only the topics listed here will be included. Some categories will appear more than others (for instance, Mathematics or Science will appear much more often).

* MATHEMATICS
* AFRICAN AMERICAN HISTORY
* NSBE HISTORY
* EARTH SCIENCE
* ENGLISH GRAMMAR
* BRAIN TEASERS

**Abbreviated Rules:** Team members will be given pencils and paper. No other reference materials can be used during the competition. Teams will be penalized for wrong answers. Of course, the team with the highest point total at the end of the game wins.

**The following describes precisely what teams should know for the competition:**

1. Teams should know the definition of *any* italicized or bold word in the given sections.
2. Teams should also know how to perform each of the tasks/skills stated below.
3. Equations will not be given during the question. Hence, teams should *know* the equation that is necessary to perform the tasks below.

# Examples for Areas of the competition

**MATHEMATICS:**

1. Times Tables
2. Addition Tables
3. Subtraction Tables
4. Division Tables
5. Measurement (length)
6. Fractions

**AFRICAN AMERICAN HISTORY**

1) [http://www.blackinventor.com](http://www.blackinventor.com/)

2) <http://www.infoplease.com/spot/bhmfirsts.html>

3) <http://www.kaboose.com/HideTheseForNow/inventors.html>

4) <http://www.history.com/topics/black-history-milestones>

**NSBE HISTORY:**

1) [www.nsbe.org](file:///D:\NSBE\Local%20Settings\Temporary%20Internet%20Files\Content.Outlook\85SYM49Z\www.nsbe.org) (all content under the about us tab)

**EARTH SCIENCE:**

1. Elements of Weather
2. Solar System
3. Geographic Features
4. Climate Zones
5. Rock Formations
6. Earth Structure
7. Seasonal Changes

**ENGLISH GRAMMAR:**

1. Parts of Speech
   1. nouns
   2. adjectives
   3. adverbs
   4. pronouns

**MATCH MANAGEMENT:**

### Format

The contest has a master game board that consists of a grid of squares (as shown below). The size of the grid is 6 rows by 6 columns. The columns of this grid indicate the question category. The rows of this grid indicate the point value of the question. The difficulty of each questions correlates to its point value.



The teams shall be called by their team name to select the category and point value of the contest question. When a selection is made, the contest will proceed according to the rules outlined in the Problem Resolution Section. After a problem is resolved, the choice of problem category and point value will proceed to the next team. The contest is concluded after the master game board has been cleared.

Each team will be asked to select a number from a container. The teams participating in the Quiz Bowl will be ordered by the number selected.

The Quiz Bowl question categories are:

* MATHEMATICS
* AFRICAN AMERICAN HISTORY
* NSBE HISTORY
* EARTH SCIENCE
* ENGLISH GRAMMAR
* BRAIN TEASERS

The competition question point values are as follows: 10, 20, 30, 40, 50 and 60 for the first round and for the second round the point values are doubled. This must be set up in within the software. See Competition Software section.

### Scoring

If there is a discrepancy in the answer to a given question, the contest judges will discuss the error and the corrective action that will be taken.

Each team shall begin the competition with zero points. A running total of the Quiz Bowl score is displayed during the competition. A team may appeal to the Head Judge if it feels an error has occurred in the score keeping or in an answer. The team captain should alert the Team Judge who will immediately alert the Head Judge. The team making the appeal should be as specific as possible with regard to the alleged scoring or answer mistake. Should such an appeal occur, the Head Judge will confer with the relevant contest officials to determine if an error was made corrective action will be taken by the judges to resolve the error.

### Problem Resolution

After a team chooses a question category and point value, the appropriate question is displayed. The team that selected the problem will be given the first opportunity to answer the question. The point value of the problem shall be equivalent to the number of seconds the teams shall be given to solve the problem. The exception to this rule shall be the 60 point questions for which 90 seconds will be allotted. When the time to solve the problem has elapsed, the Head Judge will call on the team to supply an answer. Each team should be instructed to write its answer to each problem on a piece of paper and circle it. This team will have 5 seconds from the time they are called upon to supply the answer. At the end of 5 seconds, the Moderator shall call “Time!” The last answer given before the 5 seconds expire shall be considered the team’s answer. If the Head Judge cannot make a determination with regard to the last spoken answer, the Team Judge shall ask for it to be repeated at least once. The Team Judge’s decision regarding a team’s answer shall be final.

In the event multiple answers are given, the Team Judge shall look at the team’s paper to determine the team’s answer.

A team may answer a question prior to time elapsing; however all other teams may continue to work on the problem until time has elapsed or a correct answer is given.

Upon receiving a correct answer, the team that gave the answer shall be awarded the point value assigned to the question. Once a correct answer is given, the correct solution/answer will be revealed to the teams.

Upon receiving an incorrect answer, the point value of the question shall be halved and rounded up to the nearest denomination of 5. At that time, the team with the lowest score shall be given the opportunity to answer the question. That team must supply their answer within 5 seconds of being acknowledged. If this answer is incorrect, the point value of the problem shall be halved and rounded again and given to the team with the next lowest score. This process repeats until a correct answer is given or until all teams have failed to supply the correct answer. If all teams fail to supply the correct answer, the solution will be revealed.

All Teams shall have the same time allotted to answer each question. When the Moderator calls “Time!” all teams must put their pencils down. During the course of the competition the Moderator has the option of asking a team’s judge if the all team members at their table have put their pencils down in time. In the event that the team members did not put their pencils down in time, the team will not be allowed to answer the displayed question. The next team will have the opportunity to answer the question.

Teams may not receive help from the audience. In the event that an answer is given by the crowd the question will be disqualified. The question will be simulated as if all teams have answered the question incorrectly, the answer will be shown, and the contest will resume with the team displayed on the overhead.

PRACTICE PROBLEMS

1. Find the missing multiple:

4 X 3 = 12

4 X ? = 24

4 X 0 = 0

2. What digit goes in the (\*) to make the problem true?

5 8 1

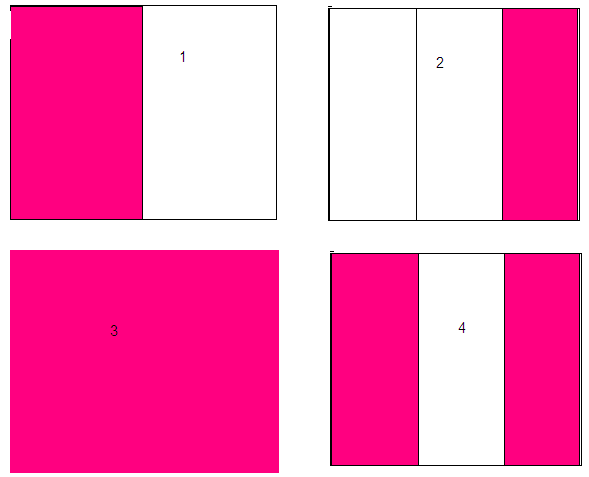
+3 (\*) 2

9 4 3

3. The fish, cat, bird are alike in many ways. One way is that they all have –

* 1. legs
  2. hair
  3. lungs
  4. backbones

4. Which of these has ½ of the figured shaded?



5. Which will be attracted to a magnet?

* + 1. Plastic Ruler
    2. Aluminum Foil
    3. Copper Penny
    4. Iron Nail

6. You have a dime and a dollar, you buy a dog and a collar, the dog is a dollar more than the collar, how much is the collar?

1. $1.00
2. $1.10
3. $1.05
4. $1.15

7. Ally, Bobby, Rachel, and Tyler put the money left from lunch on their trays.

* The green tray has 1 quarter, 3 dimes, and 1 nickel.
* The blue tray has 1 quarter, 2 dimes, and 3 pennies.
* The yellow tray has 5 dimes, 2 nickels, and 2 pennies.
* The red tray has 2 quarters, 1 dime, and 1 nickel.

Ally has the most money.  
Bobby has the least amount of money.  
Rachel has 2 cents more than Tyler.

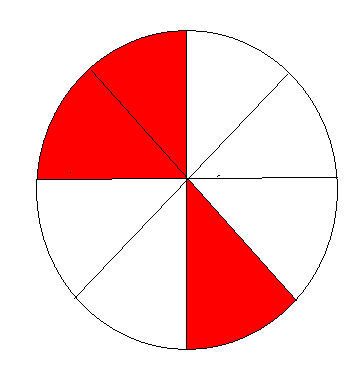
**How much money does each person have?**

8. If 7 is equal to 13 then what is 16 equal to?

|  |  |
| --- | --- |
|  |  |

9. Two men play five complete games of checkers. Each man wins the same number of games. There are no ties. How?

10. A pie was cut into 8 equal pieces. Ralph ate 2 pieces and Rita ate 3 pieces.



What fractional part of the pizza did Ralph and Rita eat?

1. 1/8
2. 6/8 = ¾
3. 3/8
4. 5/8

**Answers:**

**1. 6**

**2. 6**

**3. d**

**4. 1**

**5. d**

**6. b**

**7. Ally 65¢ (the most money)  
Bobby 48¢ (the least amount of money)  
Rachel 62¢ (2 cents more than Tyler)  
Tyler 60¢**

**8. 31, because you multiply it by 2 and subtract 1**

**9. The 2 men were not playing each other.**

**10. d**

Our alliances with these organizations are based on the common goal of each partner to prepare our youth for academic success. As a result of our partnership efforts, we confidently supply the workforce with the valued resource of diverse talented engineers and scientists.  
  
Through our current and prospective partnerships, NSBE is able to:

* Increase it’s marketing bandwidth and access to youth in our communities
* Reach the entire pipeline of individuals that support the growth of the engineering community
* Secure added membership benefits for our members
* Provide our membership with greater access to a diverse engineering and science workforce
* Align with other professional and diversity organization to promote the engineering profession and proficiency in mathematics and science
* Meet the needs of our industry and government sector support through resource sharing and program development that supports skills development for a talented workforce

We encourage you to visit our partner sites for more information on how we work together to impact our engineering and global communities!

**MATH MOVES U :** [**WWW.MATHMOVESU.COM**](http://WWW.MATHMOVESU.COM)

Raytheon's MathMovesU is an innovative program designed to engage middle school students with math at an age when their interest in the subject typically declines. Raytheon believes that tomorrow's engineers and technologists need to be excited by and interested in math today.

At MathMovesU.com, middle school students can enter a "virtual world" of math and engage with games, polls, flash cards, word problems, and factoids all centered on their passions: music, sports, and fashion. Students earn points for bragging rights and can enter sweepstakes to win prizes. The MathMovesUniversity section of the site features a glossary of math terms and a large number of hands-on worksheets for students looking for additional help and support.

**MATH COUNTS :** [**http://mathcounts.com**](http://mathcounts.com)

MATHCOUNTS heightens student interest in mathematics by making math achievement as challenging, exciting and prestigious as a school sport. Business and industry partners provide schools with coaches for the Mathletes® and assist in coordinating competitions. They also host local MATHCOUNTS activities, such as minority outreach programs and public awareness events to encourage participation and promote the importance of mathematics.

* MATHCOUNTS motivates and rewards students by fostering teamwork and a competitive spirit.
* MATHCOUNTS is more than a competition. It involves students and fascilitators in year-long coaching sessions and helps students at all levels improve their problem-solving skills.
* MATHCOUNTS builds math skills, promotes logical thinking and sharpens students' analytical abilities.
* MATHCOUNTS introduces students to math-related careers through contacts with engineers and other professionals who serve as volunteers.
* MATHCOUNTS is educator-driven.

MATHCOUNTS provides middle school-aged students with the following benefits:

* A challenging and fun activity that helps students in their math classes.
* A chance to share common interests with new and often long-lasting friends.
* An opportunity to meet students from other schools.
* The experience of developing teamwork skills.
* A chance to compete for scholarships and prizes.
* A sense of accomplishment that comes from setting and achieving goals.
* An opportunity to explore mathematics and mathematics-related careers.
* A chance to explore a variety of math that isn't always taught in middle school classrooms.

**(Strategic Partner)**

**Junior FIRST Lego League :** [**http://firstlegoleague.org**](http://firstlegoleague.org)

Junior *FIRST* LEGO League (Jr.FLL) is a hands-on program designed to capture young children between the ages of 6-9’s inherent curiosity and creativity and direct it toward discovering the possibilities of improving the world around them. Jr.FLL utilizes theme-based Challenges to engage kids in research, problem solving, and introductory engineering concepts. The cornerstones of the program are its [Core Values](http://firstlegoleague.org/community/WorkArea/linkit.aspx?LinkIdentifier=id&ItemID=1022), which emphasize contributions of others, friendly sportsmanship, learning, and community involvement.

### Each Challenge has two parts, the Poster and the Model.  Working at their own pace in teams of up to 6 and guided by at least one adult coach, kids:

* Investigate the theme, according to the specific Challenge instructions
* Document how they researched and what they learned on a creative poster
* Build a model out of LEGO elements, incorporating a moving piece

The culmination of all that hard work for many teams is the participation in an event. Events for Jr.FLL are hosted, organized, and managed by the community. This means anyone is able to run an event for Jr.FLL teams, including you! The event can be similar to a science-fair type atmosphere, with the kids discussing their project with volunteers and other teams. The event experience is all about recognizing the Jr.FLL teams and celebrating their achievements. We encourage all teams to share what they have done with others, with just family or at an event.

*\*Kid Zone will focus on the age group between 6-12yrs old.*

**(Strategic Partner)**