### **USING THIS MANUAL**

This Coordinator Manual was developed to provide information on planning an event for the National Science Bowl® for High School Students (NSB) and for Middle School Students (MSSB). This Manual provides you with information necessary to organize a successful regional competition(s) and get your team ready to participate in the National events. Keep in mind the manual is a set of *guidelines* and coordinators are encouraged to individualize their own events.

This Manual contains information on the following:

- Organizing and managing a regional competition,
- School responsibilities and filing forms,
- Competition rules and duties of officials,
- Publicity, media coverage and corporate sponsorships, as well as
- Examples of programs, competition flow charts, and other materials.



# U.S. DEPARTMENT OF ENERGY NATIONAL SCIENCE BOWL® FOR HIGH SCHOOL AND MIDDLE SCHOOL STUDENTS 2008-2009 COORDINATOR MANUAL

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## 2009 NSB Champions

Middle School – Challenger School, Newark, California High School – Santa Monica High School, Santa Monica, California



# U.S. DEPARTMENT OF ENERGY NATIONAL SCIENCE BOWL® FOR HIGH SCHOOL AND MIDDLE SCHOOL STUDENTS

### INTRODUCTION

The Department of Energy National Science Bowl® (NSB) competition is a proven tool in encouraging students from across the Nation to excel in math and science and to pursue careers in those fields. By raising the visibility of academic achievement in the sciences, the program has succeeded in placing these young people on a par with their peers who excel in athletics. Another goal is to encourage increased participation in mathematics and science courses and careers, especially among populations underrepresented in these fields.

Since the inception of the National Science Bowl® in 1991, more than 130,000 high school students from every region of the country have participated in this fast-paced, question-and-answer tournament. Each year the number of regional competitions has grown significantly. In 1991, there were 18 regional tournaments; in 2008, 67 regional events were held in 42 states, the District of Columbia, Puerto Rico, and the U.S. Virgin Islands.

Based on the success of the NSB for high school students, the U.S. Department of Energy started the National Science Bowl for Middle School Students (MSSB) in 2002. In 2008, the National Science Bowl for Middle School Students competition expanded to host 36 regional winning teams from around the country.

Similar to a sporting event, the Science Bowl competitions are set up in a round robin format followed by a single or double elimination final tournament. Teams of students compete in a "Jeopardy" style question and answer format.

The winning team from each regional competition is invited to participate in the National competition. The teams representing each regional, both middle and high school, will compete in the 2009 National finals, held April 30-May 5, 2009, at the National 4-H Center in Chevy Chase, Maryland.

Along with the academic tournament at the National finals, students also attend outstanding science seminars and, the middle school teams will participate in a Hydrogen Fuel Cell Model Car Challenge.

The NSB and MSSB regional competitions are managed and coordinated by the Department of Energy's Office of Science. Department of Energy facilities, other federal agencies' sites, utilities, and educational institutions conduct the regional tournaments.

### **CHANGES IN 2009**

National Events – Both the High School and Middle School events will be held concurrently in Washington, D.C. from April 30-May 5, 2008. In the past, the Middle School event was held in June in Colorado. Middle School teams will depart Washington, D.C. on May 4, 2009 (one day earlier).

Manual – The main changes for the 2008-09 version of the Manual are:

- All forms are the same for middle and high school teams.
- One set of rules for both middle and high school teams
- Revised medical forms
- Sample Media Advisory and Sample Press Release

### Rules Changes – see page 43

New middle school dates – The changes for this year will have a great impact on the middle school coordinators especially. Regional events will need to be held between the dates January 31, 2009 and completed by March 7, 2009. This will ensure that all travel, forms, and team information are submitted in time for the event.

Fuel Cell Events – In the case of combined academic/fuel cell event, this year we will be accepting the academic winner **ONLY** as the regional winner to attend the nationals. We are still planning to have the hydrogen fuel cell car challenge at the national event for all of the teams. Just as with years past, each winning team will receive a hydrogen fuel cell teacher kit from which to design and build a model hydrogen fuel cell car to bring to the national event.

Ambassador Award & Civility Award – There will be two civility awards in 2009, one for high school and one for middle school. The Science Bowl Ambassador Award that was started in 2008 will be discontinued. The civility award judges will accept peer nominations by ballot box as before.



### REQUIREMENTS FOR HOLDING A REGIONAL EVENT

### Why requirements?

DOE cares about Science Bowl and it is an extension of DOE into local communities. We are grateful for volunteer regional coordinators and we want to respect their high standards for the event. Since the space for teams at national event is limited, and there is greater demand to start new sites, it is logical to support only those locations with the biggest outreach to teams and support of science education.

### Minimum # of Schools

A regional competition must have a minimum of ten **schools** signed up. First year regions only need to have 6 different **schools**. There are no consequences if fewer teams show-up on the day of the event.

- There are no new NSB sites in 2009, but future new regional sites will have a "learning period" of two years to reach minimum team numbers.
- Each regional competition must meet the minimum number of schools above in 2009.
- If the minimum number was not met, then DOE will not sponsor a team to nationals from that regional event in 2010.

The minimum count of teams is measured from the online system, not by the teams in attendance. If undefeated regional champs are the reason for low team interest, the regional coordinators can boost prizes or enhancement activities to encourage participation of additional teams.

### Online System

The online system is designed to collect data and streamline paperwork for both the regional coordinators and DOE. All regional coordinators must have their teams use the online system to register for their events. Technical assistance from DOE is always available to regional coordinators or coaches as needed.

### Ensuring the Right Team Members

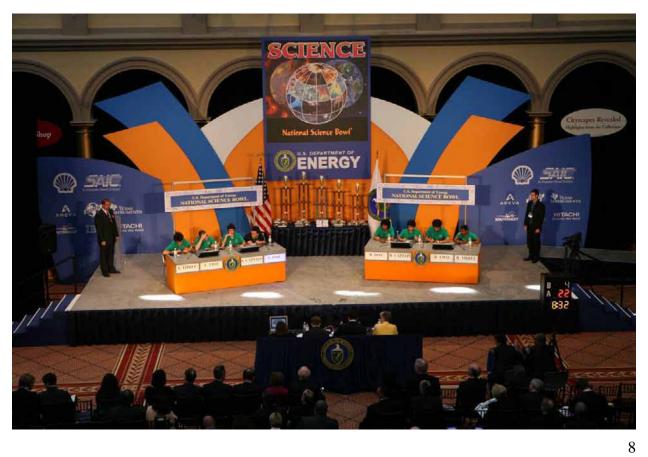
To make sure that each team coming to nationals competed together on the regional winning team, we will prompt regional coordinators to doublecheck the electronic registration form to the winning roster before submitting. Some coaches make substitutions because of illness, scheduling conflicts, or for competitive advantage.

### **Coaching Teams**

Regional coordinators cannot coach their team before or after their regional event. Minor help with strategy and logistics for nationals is OK. It is NEVER OK to share old questions or lead practices. Coordinators may not be the coach of a team participating in their regional event. The importance here is on the *perceived* fairness to the other teams.

## **DEADLINE LIST**

	NSB	MSSB
Regional Commitment	September 5, 2008	September 5, 2008
Regional Events	January 17-March 7, 2009	January 31-March 7, 2009
National Forms Due	March 11, 2009	March 11, 2009
National Event	April 30-May 5, 2009	April 30-May 4, 2009



### COSTS INVOLVED IN COORDINATING A REGIONAL SCIENCE BOWL

- Solicitation of teams postage
- Lock-out systems, clocks (some regional sites share)
- Art design, program printing, reproduction (see tab for other printed items)
- Trophies or similar awards for winners (sponsors can provide)
- Meal or snack during the day of competition
- Training time for personnel working on regional competition
- Supplies: flip charts, markers, paper, pencils, signage, etc.
- Rental of facilities (may be donated by sponsor e.g. school/university)
- Optional costs: hotels for teams who travel long distances, goodies and giveaways, T-shirt for team traveling to nationals, and enhancement activities



### **EXAMPLES OF REGIONAL SPONSORS**

- Local businesses, industry, and educational institutions may be contacted for donation of money, food, gifts, services, or facilities. Sponsors should be acknowledged in the program.
- Volunteers should be solicited from your facility, local business, industry, television/radio, education, or community institutions.
- Facilities in a given region could loan one another lock-out systems and/or clocks on alternate dates if funding is not available for the purchase of this equipment. Facilities may want to contact local high schools or colleges to see if they will lend/rent their lock-out systems to facilities for Science Bowl.
- Examples of past sponsors include: bookstores (gift certificates), colleges (space for event), hotels (for students), fast food restaurants (event food or gift certificates), local rotaries (volunteers), local sports teams (tickets for prizes), and trophy companies (trophies).

### DEVELOPING PRIVATE SECTOR PARTNERSHIPS

Establishing private sector partnerships is a critical component of a successful Science Bowl program. These partnerships provide technical as well as financial assistance. Your sponsors may desire to participate in many of your ongoing education programs throughout the year.

Many facilities and laboratories have had corporate sponsors that contributed money, gifts, prizes, scholarships, and food for luncheons. High schools, community colleges, and universities have allowed the competitions to be held on their campuses free of charge. It is essential that contact with local businesses begin early in order to secure sponsorship of gifts for the competition.

Trophies, gifts, and prizes should be donated by corporate sponsors. Both National Energy Technology Laboratories have numerous sponsors that provided money, gifts, and technical assistance; several utilities in California sponsored the various regionals in that state. Others have had several local pizza restaurants donate pizza for the competition luncheon.

### **ACADEMIC TOURNAMENT**

Each regional site determines the schedule and format for the competition. This section has resources that you can choose. There are advantages to following the format at the national event so that your winning team is more acclimated, but each site has their own limits and talents. The choice of format will depend on the space you have (10 rooms versus 20 rooms), the number of volunteers, the number of equipment sets, and the number of teams. The three most common formats are:

- (1) **Round Robin/Elimination**: Teams are divided into divisions to play within a division, then high teams advance to an elimination format. This format will take more time and space than the others.
- (2) **Single Elimination**: Teams are either seeded or randomly matched up and once they lose a match are eliminated. Winners advance till there is one undefeated team. This is the most simple and fastest format.
- (3) **Double Elimination**: Same as above but teams move to challenger bracket after one loss and are eliminated after two losses. Winner of challenger bracket plays undefeated team for title.

There are other formats available, and each site can decide what would work best for them.

### **ACADEMIC QUESTIONS**

DOE Headquarters contracts with an independent company to write new questions each year. There are multiple sets to cover regional and national competitions. Depending on your location and event date, you will be mailed one of the sets in early January. The goal is to limit the chances that a visitor might overhear a question that they can answer in competition weeks later. Questions are written to match the grade level of the students and become progressively more difficult in later competition rounds.

DOE will have a group of science/math experts review the regional questions prior to being sent to the regional coordinators. By the time they are sent to you, these questions have been reviewed, comments sent to the contractor, and revisions have been made. However, since no one is perfect, we encourage you to have a team of experts review your questions before your event. Any feedback sent to DOE will be circulated to other sites.

Regional coordinators should collect printed questions after the event and destroy them. Do not release questions to teams, volunteers, or the media. These questions could possibly be used in the future or may be similar to future questions. Teams may find practice questions on the website.

Do not share older questions from either tournament with your regional winning team to assist them in practicing. For example, middle school students should not have access to past high school questions.

### SCIENCE BOWL CENTRAL

Science Bowl Central (SBC) is designed to provide a central location for information prior to and between rounds of competition. Officials/volunteers check in here to receive their final briefing and room assignments. Team registration also occurs at Science Bowl Central. Visitors, such as parents, friends, newspaper reporters, or other media staff, will ask for information on the competition in progress.

Science Bowl Central should be staffed by at least two individuals throughout the course of the day. Their responsibilities include answering any and all questions pertaining to the competitions, scores, advancement of teams, etc. In addition, two to four individuals should "roam" the competitions to ensure that everything is running smoothly.

### **Primary Responsibilities:**

- Serve as the source for competition information.
- Update Science Bowl *competition scoreboards* / *flow charts* An overhead projector/screen or an 8' x 8' wall-mounted chart can be utilized.
- Facilitate scientific challenges A pool of scientific judges (one from each discipline) should be available in a designated area during each round.
- Collect questions packets and *official scoresheets* when they are turned in at the end of each round. You must collect all questions by the end of the competition day. These questions must be destroyed and not given to any teams, officials, etc.
- Have available *tie-breaker questions*, should they be needed. The need for these may occur at the conclusion of round robin play or at the end of a double elimination match.

### Items that should be available at Science Bowl Central:

Paper
Pencils
Magic Markers
Extra Buzzer Systems and Official Clocks, if possible
Extra light bulbs for Lockout Systems
Extra batteries for Official Clocks

At the beginning of the competition, a few extra volunteers should remain at Science Bowl Central to serve as "emergency" officials in the event that one of the scheduled officials does not arrive.

### SCIENCE BOWL EQUIPMENT

When equipment is a prohibitive cost, regional coordinators do network with each other to share equipment. The recommendation is to plan to share early so that you pick a good date and arrange for shipping/delivery. (Each system can cost \$120-\$800, and each competition room will need one system.) Other resources may include borrowing them from a local university quizbowl team or your local high school science bowl teams. It is also possible to have homemade systems.

### Vendors for lock-out buzzer systems (in no special order):

■ Quizzer, Ltd.: <a href="http://www.quizzerltd.com">http://www.quizzerltd.com</a>

■ Quiz Systems: <u>www.quizsystems.com</u>

■ Zee Craft: <u>www.zeecraft.com</u>

Knowledge Master Quiztron III:

www.greatauk.com/CompetitionEquip.html

■ QuikPro Systems: www.specialtydesigncorp.com/

■ Sho-Me Smart Light: www.triplequestions.com

■ Patrick's Press: www.patrickspress.com/Buzzers.htm

■ JEM Designs: www.jemdesigns.com/products.html

■ Groupics/Buzzers.com: www.buzzers.com

■ Novel Electronics: www.buzzersystems.com

■ Quizco QuizMaster: www.quizco.com

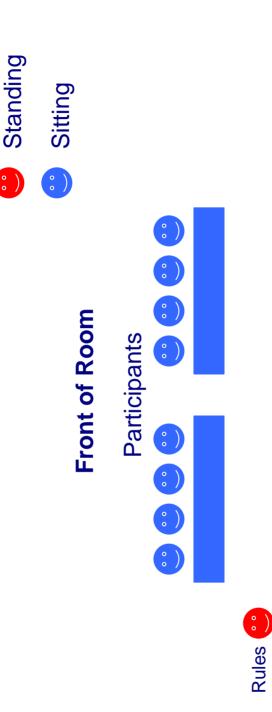
Quiz Pro 2000: www.cp4e.com

Arizona Science Bowl has custom-quizzers made by Gene Holmerud (geneous@cox.net).

### **Official Clocks:**

- Some facilities have used sports competition clocks purchased from their local sporting goods store. If computers are available, you may download a competition clock program from www.netl.doe.gov/coolscience/funstuff/sb\_clock.html.
- Others utilize a wall clock in the competition room
- We recommend the use of stopwatches to time bonus questions, etc.

# (Audience can see students faces) **NSB Competition Room Set-Up**



This is only one option, see next page for another common set-up.

Audience

Moderator

Science Judge

Scorekeeper

Timekeeper 😬

Judge

# Competition Room Set-up in University Classroom (Audience cannot see students) with limited volunteers

Front of Room (blackboard)

Standing



Sitting



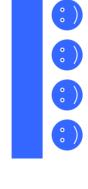
Rules (

Judge



Timekeeper

Moderator



might make this the

School furniture

that Mod can stand

only option. Note



volunteers, the Mod can also be rules students cannot or sit. If only 4 see audience. judge, esp. if

Audience

### SCIENCE BOWL COORDINATOR

The laboratory director, facility manager, education director, utility representative, etc. should appoint one person to coordinate the facility's Regional Science Bowl. This person will be responsible for planning and executing the regional competition, serving as the winning team's point of contact and working with the National coordinator. The Science Bowl coordinator will represent his/her facility at the National event by serving as the team's escort and they can expect to be utilized throughout the National event. There are many tasks that the regional coordinators are assigned, from bus monitors, to seminar facilitators, to competition officials. This is work!

The coordinator may organize the facility's individual regional event in whichever manner may be desired. Many sites have a Science Bowl committee with members having specific responsibilities, such as volunteer coordinator, media, sponsors, etc.

Middle School-specific: The regional event may be either an academic competition or a combination event, including a hydrogen fuel cell car race. It may be necessary to hold the combined academic/car race competition over a two-day period.

# In order to ensure an easy transition to the National competition, we ask that each Region strictly follow these procedures:

- Host your event within the date guidelines so that the National coordinators can have the necessary information to plan their event. NSB regional competitions must be conducted between January 17 and March 7. MSSB regional competitions must be conducted between January 31 and March 7. All forms are due no later than March 11, 2009.
- In order to avoid misinterpretation of the rules at the National competition, the same rules should also be used for the regional events. In order to prepare the teams, if the regional rules do deviate from the Nationals, we ask that you send headquarters an email stating the differences.
- Solicitation of teams can be done in any manner that is fair and inclusive. Private, parochial, and home schools are all eligible to participate (see eligibility rules).
- Regional events are required to use the on-line registration process. The on-line process is created for you, and information is easily submitted for the winning team.
- To qualify to send a team to the National event, a regional competition must be held and coordinated under the leadership of the Department of Energy's Office of Science.
- The regional science bowl coordinator should not be a team coach or assist in team practice. This will help avoid conflicts of interest, ensure integrity of the questions, and clarify roles/relationships of the coordinator to volunteers and to other coaches.

- A regional competition must have a minimum of ten schools signed up. First year regions only need to have 6 different schools teams. There are no consequences if fewer teams show-up on the day of the event.
- Regional media coverage should be arranged through your local press office. However, only a few questions (less than 10) from the competition may be aired or published, and only in the interest of media use.
- Training of all personnel working at the regional and National competitions is **mandatory.** Moderators and scientific judges MUST have knowledge of the scientific material and be able to clearly enunciate the questions and properly pronounce the scientific terms. While rules judges, scorekeepers, and timekeepers need not have knowledge of the material, they must know the rules and be trained in the proper procedures. Sample training materials can be found on the Web site and on the CD.
- You will provide the regional questions to the moderators and scientific judges prior to the competition. They are responsible for securing this material and returning it following the competition. To avoid problems regarding the security of the questions, moderators and scientific judges should not be related to any participating coach or student. You should collect and destroy the regional questions after the competition.
- Once a team has won your regional, you must **immediately** notify the National coordinator by selecting the team online. You are responsible for making sure that the winning team submits all necessary forms for the National event by the stated deadlines. The regional coordinator should gather, sort, and review all forms before sending them in as one complete team package. Forms are to be complete and legible.
- At the National finals, the representative team from each facility must be composed of the same team members who competed in the regional event. Awards given at the National event will only be given to and used by the team members competing.
- Coordinators are strongly encouraged to attend and participate in the National Event.
- Coordinators are expected to maintain a connection with the DOE headquarters by reading all materials sent or emailed, participating in conference calls, and reading meeting minutes.

### COORDINATOR FREQUENTLY ASKED QUESTIONS (FAQ)

### When should I decide to host a regional event?

Interested sites contact the National coordinators during the August preceding the event (August 2008 for an event in January-March 2009). Every year, each site will need to fill out a Regional Registration Form which can be found online. It is best to check calendars for your location, sponsors, and volunteers, as well as the local school district calendar before choosing dates. You may always contact the National coordinators at any time of the year to express your interest.

### Who is the coordinator?

The coordinator is any person who volunteers to be the lead contact for that regional event – this could range from a college student, professor, teacher, retired employee, home school parent, lab employee, or any other interested adult.

### Who works on the event planning?

The coordinator often recruits 2-10 people to be on the Science Bowl committee. They can share the workload and better recruit volunteers and sponsors. You may want to have a committee member for different functional areas, such as recruiting and registering teams, recruiting and training volunteers, recruiting and picking up items from sponsors, creating program or t-shirts, trophies and prizes, setting up location, inviting media outlets, etc.

### How much does it cost?

See page in manual on expenses. DOE does not send money to regional sites, but it does pay for and distribute the competition questions. If you have access to discounted items, you can host an event with little money. The average event runs on less than \$5,000. You can recruit sponsors to share the burden, and/or you can ask the teams to pay a registration fee.

### Do I get paid?

DOE does not pay any regional coordinators, but some coordinators are paid a salary from their sites, or at least this is included in their job description. Most participate on a volunteer basis.

### How much time does it take?

Depending on the size of your event, it can take more or less time. Most coordinators begin the planning process the summer before. Most events are one-day long, but some are a weekend, and still others host several sub-regional events to qualify for their regional event.

### Who can I ask for help?

First, look through this manual for helpful tips. Then, contact DOE headquarters or any of the other regional coordinators. You will find most people have had similar experiences. See "who to contact" page at the back of this manual.

### COORDINATOR ROLES AT NATIONAL EVENTS

Regional coordinators are encouraged to travel to the National events with their team, or to arrive one or two days earlier to assist with last minute preparations. Some sites send more than one representative while others rotate the responsibility.

Coordinators serve an important role on the event team – they work as competition officials, bus monitors, seminar presenters, car race officials, help stuff goody bags, help set up and register the teams, move equipment, hand out awards, etc. The job is all day and night, so expect to be kept busy lending a hand. The National coordinator will provide a detailed line-by-line schedule with all the details and assignments in advance.

In addition to their responsibilities, coordinators are able to enjoy the energy from the teams, root for their own team, sightseeing, and network with fellow coordinators.

Coordinators are invited to provide feedback and suggestions about the National event, the question sets, or any other aspect of the science bowl. Every other year, coordinators are invited to a strategy meeting – the next one will be in August 2009.



# TIPS FOR REGIONAL COORDINATORS FROM VETERAN COORDINATORS

### **Planning the Event:**

When planning your regional, spread the workload by forming a committee to handle jobs such as finding volunteers, procuring funds and necessary equipment, being responsible for the accuracy of questions, etc.

Select members for a Science Bowl team/committee with the following responsibilities:

- Sponsors donations
- Training
- Public Affairs media
- Food and Beverage coordinates pick-up, set-up
- Administrative mailings, receipt of packets from schools
- Question Review
- Divisional Assignments of Teams
- Equipment
- Competition Set-up
- Graphics logo design, program, certificates

Have sponsor letters go out in August with return of monies/commitments by December. Accept all types of donations:

- Breakfast items (juice, bagels, donuts, grocery certificates to be used for coffee, etc.)
- Lunch items (cookies, fruit, beverages)
- Store certificates (Bageland, Dunkin Donuts)
- Money
- Give Aways (pens, stress balls, etc)

Create a list of important dates at your first meeting in June/July:

- Date of first mailing to schools
- Date intent to compete should be returned
- Date registration fee is due (if you have one)
- Date registration and other forms are due
- Date of training
- Date of competition (preliminary/final)

Get your notice out for volunteers in December:

- Mandatory training two hours
- Minimum of two years volunteering before becoming a moderator
- Utilize children for runners
- Youth groups are given community service credit for volunteering
- Relatives and friends are a great resource
- Reward your volunteers VERY IMPORTANT (shirts, luncheon with certificates)

### **Words of Wisdom:**

- Be flexible.
- Let all who help you carry their portion.
- Be prepared and allow the competition to care for itself.
- Start early (like July) to think about who and what you will need.
- Solicit volunteers from all avenues all year long.
- Remember that this competition is for the students; we just put it on.
- Everyone who comes should go home happy including the coordinator for sure!
- Get plenty of rest those final days before your competition.
- Training and practice for volunteers is crucial.
- New and previous volunteers benefit from this and improve your competition day.
- Get help for your competition in February for the next year's competition.
- Call another coordinator. They love to share their experiences and can help you a lot.
- Understand what your budget is (or isn't).
- Plan for inclement weather.

### Surround yourself with an energetic, positive team:

- Empower them, praise them, bribe them.
- Don't try to control all of it, but assume the responsibility to see that things get done.
- Know that you can't please everybody, accept it and move on.
- You're going to make mistakes and you're probably going to be running the next regional competition, so there's time to make changes/improvements.
- Life isn't perfect neither are regional competitions, just try to make sure that it's fair for everyone... If you have a crummy moderator, remember that he or she is equally crummy for both teams... It ain't perfect, but it's fair.
- Start your planning ASAP.
- Ask for help... lots of us have been in your shoes and wouldn't mind helping out.

### **Scheduling and Volunteers:**

Be sure to find experts in every subject area to: (a) check over and amend the questions BEFORE Game Day and (b) be available ON Game Day for appeals. Know where they are at all times on Game Day for when questions arise.

Rounds should be scheduled 30 minutes apart – any more is too long in regionals.

Take as many volunteers as you can get... Kids can be runners, teenagers can time/score, just make sure they are well behaved and under control. Train, rehearse, practice, practice, PRACTICE!

Moderators must be easy to understand, have good hearing, and know how to pronounce. Overbook your volunteers – you're bound to have no shows or late arrivals. Assign your "A Team" to early rounds.

### **Getting Schools to Participate:**

- Check with your State Board of Education for a current listing of high schools and addresses.
- Send a colorful poster/memo to the Science Department chair early in the school year include a trinket of some sort: a keychain, mug anything to get their attention. Then send a follow up a bit closer to competition.
- E-mail, snail mail or fax sheet that they can send back asking for more information or informally reserving 1, 2, or 3 team slots.... It gives you an early idea what you're in for.
- All regional events use the on-line team registration system for schools to register a team for their event.
- Only accept as many teams as you can handle, looking at your facilities and number of volunteers.
- If you have powerhouse schools that dominate these types of competitions, you might want to break your schools into size categories based on enrollment or geographic zones. Some of the smaller schools might love to be able to attend Nationals and could well appreciate it more than the larger schools. Spread the wealth!

### **Sponsorship:**

- Lots of folks want to be associated with educational assistance.
- Assign a very personal, persuasive person to be in charge of sponsorship.... Ask for money, items, volunteers, etc....
- Radio stations will often give away CDs, T-Shirts, etc.
- Theaters will give away passes.
- Book stores will give away coupons; federal agencies will supply volunteers.
- Soda and pizza companies will donate food or cut you a deal.
- Start early keep at it

### On the Big Day

On Game Day, have plenty of volunteers to help with registration and general running.

- If you lack officials in sufficient numbers, the following can be doubled up if absolutely necessary: runner-timekeeper and scorekeeper-rules judge.
- In addition, if scientific judges are in short supply, the important function of reading the questions along with the moderator can be performed by just about anyone (and challenges in this case can be taken outside the room).
- Questions should be handed to runners one round at a time. (If not, there is a very real possibility that some moderator will read the wrong round's questions, which precludes their being used in their proper round.)
- Some folks give each moderator a binder with all the rounds of questions in it.
- Have at the very least one extra round of questions (even if you have to write them yourself). This is ESSENTIAL to take care of unforeseeable problems that may occur, such as teams going to the wrong room or the wrong questions being read in some round.
- It's very helpful to have the runner be responsible for knowing which two teams are to be playing in their room at the beginning of each round, to make sure the right two teams are actually playing.

If at all possible, set up the afternoon before competition: get the rooms organized, lock-out

systems set up and tested, all supplies distributed, and signs up – and then have someone double check it all. Plan for problems – have extra lock-outs, extension cords, etc.

Use a checklist – it helps a lot.

Have a cell phone or two.... Give the teams these numbers and use them as communication control. If there's an accident on the way in or if they're late, then they can call. Also let family members have the number for other types of emergencies.

It doesn't hurt to have a nurse or EMT on site.... Allergies and stress can do weird things to kids (and coordinators).

Assign a core team to Command Central. They're the ones to answer questions, resolve challenges, and solve your problems.... They should be experienced, firm but fair.

Have one person assigned to food delivery coordination.... Get it there early.

Assign a clean up team – don't assume that you're going to have help at the end of the day.

### Things that DO go wrong:

- Plan for no-shows: unless you charge a fee, you're bound to have school no-shows.
- Plan your divisions/brackets for all sorts of contingencies. Volunteers may not always show up on time. Figure out the minimum you can get by with in each room... try to have some experience in each room. Scoring and timing can be done by the same person.
- Early rounds are usually when the moderators will make mistakes skip over questions, read the wrong questions, give out answers prematurely so go over this in training. If you have the luxury of extra moderators, assign the experienced ones to early rounds. Have the less experienced sit in and watch.
- Inclement weather plan for it. Set up a system of notification and have a contingency plan.
- Equipment failures have extra equipment on hand. Schools usually have their own lock out systems... have them bring their systems as a back up.

### **After the Event:**

### Your Winning Team(s):

- Click the winning team from the on-line system.
- Develop a relationship with the coach and team members.
- Have the information about Nationals ready... discuss any conflicts right away. Ask about IB, Prom, Sports, other competitions you might be taking the second place team instead, so have their forms, photo, etc. available.
- Provide them additional study resources (Web sites, topics, etc) to prepare them for Nationals.
- KEEP ON THEM about their forms fill out as much as you can ahead of time.
- Provide information about the trip and contact numbers to the parents.

### Web site:

- Keep your Web site up-to-date with regional information.
- Publicize regional winners.

### Sponsors:

- Publicize their support.
- Give them a shirt, certificate, program, thank-you letter.
- Ask them to speak to the students at your competition.
- Utilize complimentary tickets for school prizes or civility awards (e.g., museums, zoo).

### Look for a co-sponsor(s):

- Local college.
- Major science organization (e.g., Spectroscopy Society).

### Equipment:

- Have enough quizzers and clocks for all competition rooms.
- Replace old equipment on a yearly basis.
- Have equipment checked during Christmas/holiday time period, when individuals aren't as pressed with jobs/tasks (e.g., electricians).
- Let others know if you have equipment available to borrow.

### Read the evaluation sheets, if you do one:

- Send results of evaluation sheets with letters to the schools thanking them for participating. Let them know you care.
- Address the relevant issues. Always strive for improvement.

Get forms in to the National office (and respond to their questions) in a timely fashion. Doing so makes everyone's lives easier.

### **ENHANCEMENT ACTIVITIES**

Science Bowl should be more than an academic competition. Teams can learn more from a variety of activities that have them use different skill sets, that de-emphasize the competitive aspects, and that accentuate the networking environment.

You are encouraged to expand your event to include "enhancement activities" that may provide greater benefit by encouraging and reinforcing interest in math and science. Some examples of enhancement activities are:

- Guest speaker
- Facility tours
- College or career fair
- Internship fair
- Hands-on challenges (build highest tower, build bridge)
- Door prizes
- All-star awards
- Science demonstrations
- Build and race rubber band-powered vehicles or fuel cell vehicles
- Photos
- Sight-seeing trips
- Teacher workshops



# REGIONAL SCIENCE BOWL SAMPLE CRITICAL TIMELINE

### **AUGUST**

- Identify Science Bowl point of contact.
- Determine date of Regional Science Bowl.
- Attend Science Bowl Planning Conference (every other year).
- Identify competition area (counties, entire State, multi-states, etc.) and estimate number of schools in competition.
- Submit request to DOE HQ to host a regional Science Bowl (middle school only)
- High School Regional Coordinators submit on-line regional site form to commit to conducting a regional event.
- Determine facility/building to have competition.

### **SEPTEMBER**

- Regional Science Bowl sites will be selected and notified by DOE HQ (middle school only).
- Coordinators Manual is sent to all coordinators.
- Submit Coordinator Commitment form to DOE HQ.
- Posters and brochures are sent to Regional Coordinators.

### **5 MONTHS PRIOR TO EVENT**

- Recruit teams: issue announcement to schools in identified area.
- Send letters/brochures and contact area businesses/companies to seek sponsorship for the regional event, including gifts, prizes, etc. Sponsors will be recognized in the National program (see Tips for Regional Coordinators section for sponsorship information).

### **4 MONTHS PRIOR TO EVENT**

- Notify coaches of selected schools.
- Provide coaches with Science Bowl information including:
  - Competition Rules
  - Sample Questions
    - MS: http://www.scied.science.doe.gov/nmsb/default.htm
    - HS: http://www.scied.science.doe.gov/nsb/samplqs.htm
  - Instructions on how to use the online system for online registration
  - Regional Forms (as required by your regional competition)
    - Medical forms (coach and student)
    - Parental Consent Form
- Notice of coach orientation meeting (optional) the orientation meeting should be held approximately 3 months prior to event.
- Meet with your public affairs office to discuss your regional event and plan a media strategy (see page on media strategy).

### **3 MONTHS PRIOR TO EVENT**

- Hold coach orientation meeting (optional).
- Secure lock-out systems and official clocks and race track materials.
- Determine whether or not to have a luncheon in conjunction with the competition and/or awards ceremony.
- Select and order trophies.
- Confirm sponsors.

### 2 MONTHS PRIOR TO EVENT

- Recruit officials/volunteers [moderators, scientific judges, rules judges, timekeepers, and scorekeepers] and race judges for the car race (optional middle school only).
   Suggestions: post flyers and place a notice in the company newsletter requesting volunteers to assist with the Science Bowl, be sure to include contact names and phone numbers.
- Notify all officials/volunteers of **MANDATORY** training and practice sessions.
- This is the suggested deadline for student registration forms from competing schools. If some schools have dropped out, call those on the waiting list to see if they are still interested and if they are, direct to online registration form.
- Deliver fuel cell kits to teams (middle school only).
- Arrange for event publicity—work with the public affairs office to contact local newspapers, TV, and radio stations.
- Confirm donated gifts, awards, etc. from sponsors.
- Create gift bags for all participants (optional), prizes for winners—suggestions for winners include: trophies, calculators, gift certificates, savings bonds, etc.
- Design program (optional).
- Design tournament flowchart for academic competition and car race, if appropriate.
- Determine speaker for luncheon/awards ceremony (optional).

### 1 MONTH PRIOR TO EVENT

- Obtain trophies.
- Reproduce information packets for Science Bowl officials—be sure to include the rules and official roles for academic and car race (middle school only).
- Mandatory training session for all officials/volunteers with "mock" competition and car race (middle school only).
- Receive competition questions.
- Reproduce and send out question packets for moderators and scientific judges.
- Finalize and produce program.
- Finalize and produce competition schedule, scoreboards and car race heat cards (middle school only).

### DAY OF EVENT

- Conduct Regional Science Bowl competition.
- Collect comment forms (optional) from officials and participants.
- Photograph winning team.

### **AFTER EVENT**

- **Immediately press selection button online**, notifying DOE Headquarters of your winning team.
- Complete all National forms (see Forms section). DOE has automated the forms for both the regional and National event. Some will be completed and submitted directly online; forms requiring signatures will be completed online, downloaded, signed and sent via mail (see forms checklist).
- Send thank you notes to all officials, competing schools, and sponsors.
- Collect and mail all local media clips to DOE Headquarters.
- Make travel arrangements for the Regional Science Bowl Coordinator to travel to the National event.
- Assist with the competitions at the National event.

### Teams at the 2008 NSB for High School Students



### **PUBLICITY**

The Department of Energy Science Bowl and the regional competitions are excellent opportunities for positive stories about your organization's activities. With a little bit of planning and coordination through your public affairs office, you can receive press coverage of your regional event and your winning teams' participation in the finals. You may want to have all of your teams sign privacy release forms so you will have their parents' permission to take photos/video of them. At the national event, photos will be taken by a professional photographer and e-mailed to your local area newspapers for stories.

### SUGGESTIONS TO INCREASE YOUR MEDIA VISIBILITY

- Schedule a meeting with your public affairs office to discuss your regional event and plan a media strategy. Schedule this meeting early and meet more than once.
- Remember that media will want to focus on the "local interest."
- Know your competitors. Prepare biographies of team members and their coaches including hobbies, club memberships and honors, and background sheets on the participating schools.
- Know your sponsors. Prepare a background sheet that includes a quote from your sponsors on why they agreed to sponsor the competition.
- You may want to arrange for a backdrop behind the photos at the awards ceremony. Choose non-reflective material that will look good in the photos.
- Media outlets should include:
  - \* Public service announcements/calendar of events on radio and TV.
  - \* Calendar of events in newspapers (dailies, weeklies, advertisers, shoppers, high school) and magazines (State or Sunday supplement).
  - \* Feature stories in radio, TV, newspapers, and magazines.
- Encourage the competitors to contact their local media.
- Send out a press advisory to your list of media outlets before the competition and then a press release after the competition. E-mail reporters with event results and photographs.
- Have an event Web site and post photographs promptly after the event for reporters. Please link to the NSB Web site on your site.
- Videotape the event and provide footage to local television stations.
- Clip or tape all stories about the event, and send copies to DOE HQ.

# 2008 DOE NATIONAL SCIENCE BOWL®

# for High School Students Media Results



In 2008, the U.S. Department of Energy's (DOE) National Science

Bowl® for high school students received more than 590 media placements, resulting in more than 220 million media impressions through print, broadcast, online and radio outlets. The 2008 campaign built on two previous years of success, raising the competition's visibility and branding it as one of the nation's premiere educational events.

Potomac Communications Group (PCG), along with DOE's Office of Science, Office of Public Affairs and a team of dedicated regional coordinators, organized efforts to promote both the regional and national competitions. The regional competitions resulted in 324 stories, and the National Finals generated 270 stories, a 39 percent increase in total stories over 2007 and a 100 percent increase over 2006.

The reduction in media impressions from 2007 reflects our success last year in generating three national television hits. First, NBC's Today Show produced an eight-minute segment, narrated by Tiki Barber, on the Buffalo Prep allgirls team. Second, ESPN's SportsCenter mentioned the event in a teaser about the Colorado Rockies. Finally, the PBS program MotorWeek produced another eight-minute segment on the hydrogen car competition at the high school finals.

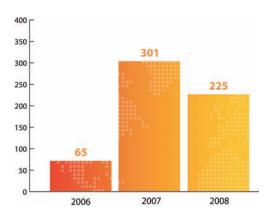
While the 2008 campaign featured many major online and print places – including a national wire story from the Washington desk of the Associated Press that ran online and in many of the major regional papers across the country – and local TV coverage in both Los Angeles and New York, there was no marquee national television placement.

With that caveat in mind, visibility for the National Finals continues to increase each year. Starting from 65 million impressions in 2006, PCG and DOE have worked to build an audience in the hundreds of millions for two consecutive years. With the combined lessons learned from the past three years of solid performance, PCG believes that the National Science Bowl will enjoy an even stronger year in 2009. The "Lessons Learned" section of this report (found behind the "Lessons Learned" tab in this notebook) outlines the adaptations PCG believes will take the National Science Bowl to the next level.

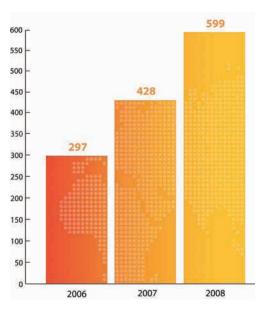
Also, this year saw an unprecedented number of journalists cover the National Finals, held for the first time at the National Building Museum, in person. These journalists represented not only the local Washington, DC media, but also stringers from outlets across the country. Team members, coaches and DOE representatives conducted more interviews at the finals than ever before.

The largest increase in media attention in 2008 came from local print and television during both the regional and national competitions, underscoring the importance of tailored local outreach. The graphs below demonstrate the overall coverage for the past three years of competition:

### Total Media Impressions (in millions)



### **Total Media Placements**



### Highlights from the 2008 Campaign



Union-Tribune.

The Miami Herald





Major regional papers like the *Chicago Tribune, San Diego Union Tribune* and *Miami Herald* ran coverage of regional competitions, resulting in more than 10 million print impressions alone by the end of April.

The Associated Press national wire story, published originally on May 5, 2008, featured the Santa Monica regional championship team and its victory in the National Finals. The story ran in major newspapers and some of the largest online news sources in the country, including www.usatoday.com and www.time.com.

CNBC mentioned the National Science Bowl as one of the programs currently in place to bolster American competitiveness through better science education. This placement was part of a concerted effort to position the National Science Bowl as both a lively academic competition and a showcase for America's next generation of innovators.

### Blanketing the Nation with NSB Stories

News of the 2008 National Science Bowl reached audiences in 43 states, the District of Columbia and the U.S. Virgin Islands. This represents roughly 95 percent of the states and territories participating in the National Science Bowl, plus three states without regional champions. It covers a time period beginning in January, when the first regional competition was held, through early June. Media outreach was conducted for 40 of the 64 regional competitions.

### NSB Media Strategy

PCG, DOE's Office of Science, Office of Public Affairs and the National Science Bowl media team built on a key lesson learned last year and used news about the regional competitions and their winners to build momentum for the National Finals.

PCG strategically timed a series of media releases to promote the competition from the first regional event through the National Finals. Many of the releases were picked up verbatim, providing DOE with a way to share its messages about the competition without a media filter.

### A list of releases follows:

### U.S. Department of Energy Kicks off 18th National Science Bowl

This release launched the "National Science Bowl Season" and highlighted upcoming regional competitions as well as the National Finals.

### DOE's National Science Bowl Regional Competition Advisories

Media advisories were sent to local media two to three days prior to 40 regional competitions and were followed by phone contact to make sure that weekend editors and producers received them. This process also helped refine these media lists to make them more effective in the media room at the national finals.

### DOE's National Science Bowl Regional Winners

News releases on 40 regional competition winners were sent out immediately to local media, in most cases on the night of the competitions.

### Your Hometown High School is Coming to Washington

These customized releases entitled "Your Team is Coming to Washington" were sent to media in home markets of all 67 participating schools and listed the names of the schools, students and coaches.

### DOE's National Science Bowl Kicks off Thursday

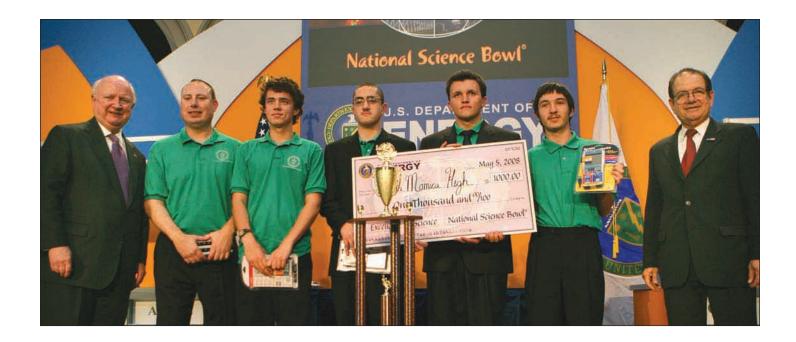
As with the regional competitions, an advisory featuring a schedule of the weekend's events was distributed the Tuesday before the competition began (Tuesday, April 29). Follow up calls were made to local Washington and national media in order to drive attendance at the event.

# "Local school" Advances to "Sweet 16" in DOE's National Science Bowl in Washington, DC

As teams were eliminated and potential winners emerged during the National Finals, local media with successful schools were alerted by the on-site media team, which included several regional coordinators. This "countdown" approach obtained coverage for teams that played well and resulted in on-site phone interviews for multiple teams and their coaches.

### Santa Monica High School Wins the DOE National Science Bowl

The moment a champion was announced, a formal news release with a photo of the Santa Monica team was sent to a national media list and the California media. Numerous outlets picked up the release. The mammoth NASDAQ video screens in Times Square featured the photo of the winning team and the announcement of the champions. Follow-up telephone outreach was conducted from the media room and the winning team was interviewed by AP and others. *The Christian Science Monitor* also profiled the team in June, with a lengthy article.



### Media Coverage Breakdown

National Science Bowl media coverage was spread across the nation in multiple types of media. For the purpose of this report, we have defined national coverage as any article or report that discusses the national competition and those articles featured in top media markets. Regional coverage is focused exclusively on the regional competitions leading up to the National Finals.

### Online

Online media accounted for just 31 percent of the total media placements, but 86 percent of media impressions in 2008. Online versions of national publications and regional newspapers and television stations in large markets such as Los Angeles, Washington, DC, Chicago, Detroit and San Francisco ran stories on the regional and national winners.

The online coverage also included the successful placement of Secretary of Energy Samuel Bodman's op-ed in markets like Detroit and Albuquerque.

### Print

2008 saw a dramatic rise in both the number of print stories and the readership of those stories covering the National Science Bowl. Print coverage accounted for more than 50 percent of total media placements and roughly 12 percent of media impressions. The Los Angeles Times, The Chicago Tribune, The Washington Post, The Detroit News, The Miami Herald and The Cincinnati Enquirer covered the National Science Bowl, among other major outlets.

### Television

16 percent of media placements and 2 percent of media impressions came from broadcast and cable television, behind online and print media in volume of coverage. Television coverage varied from short updates on regional results to longer profiles of local teams gearing up for the National Finals. Regional stories blanketed regional markets in states from Pennsylvania to Arkansas to Hawaii.

### Radio

Radio covered both the regional and national competitions, but it is difficult to measure radio placements. VMS Monitoring Service (which was used for the campaign) tracks radio in a handful of top markets and the coverage included in this report reflects radio hits in markets across the country.

### 2008 DOE NATIONAL SCIENCE BOWL®

for Middle School Students Media Results



In 2008, the U.S. Department of Energy's (DOE) National Science

Bowl® for middle school students received almost 84 million media impressions through print, broadcast, online and radio outlets, far surpassing last year's 13 million impressions. Furthermore, the middle school competition received 191 hits, an impressive jump from last year's 75 stories.

Potomac Communications Group (PCG), along with DOE's Office of Science, Office of Public Affairs and the public affairs office at the National Renewable Energy Laboratory (NREL) worked hand in hand to generate media coverage. While promoting the high school regionals and finals was PCG's focus, the resources devoted to the middle school competition produced notable results.

The jump in the number of hits and impressions can be attributed to several factors including lessons learned from last year's outreach, the growing visibility of the high school event and more vigilant tracking of placements. As the statistics suggest, the National Science Bowl is expanding its niche in the media market.

### Coverage from start to finish

Stories about the National Science Bowl for middle school students started surfacing in February as regional events began to get underway. From February forward, coverage remained steady with over 10 unique stories published each month. June marked a noticeable uptick in coverage as PCG refocused its efforts following the conclusion of the high school event. Efforts to generate coverage in the weeks leading up to the finals in Golden, CO, and then at the finals, proved to be fruitful despite difficult circumstances which included not having a team at the competition from the host region. In total, 134 of the 191 hits published, posted or broadcast about the middle school competition focused on the national event.

### **Media Strategy**

Building on our experience with the high school competitions and last year's middle school competition, PCG, DOE's Office of Science, Office of Public Affairs and the public affairs staff from NREL created a media plan that maximized media exposure. The same media messages and tactics that were developed for the high school event were employed to generate coverage for the

middle school competition. Highlighting the middle school event as a stage to encourage the growth of the country's next generation of scientists and engineers was the central message of releases and pitches. Additionally, the hydrogen car challenge was featured successfully as a news hook to draw local media attention.

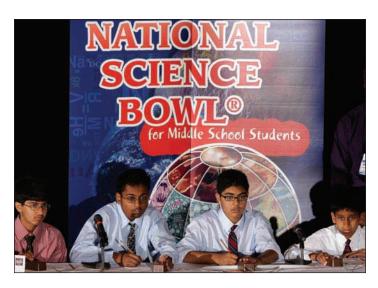


PCG did not pitch the regional middle school events and instead constructed an outreach strategy for the finals that put emphasis on well-timed releases and focused phone outreach. Phone calls in support of media releases generated interest from reporters that translated into placements. The releases themselves were picked up verbatim in large numbers, providing an unfiltered avenue for DOE's messages about the competition.

While the middle school competition did not generate media exposure at the same level as the high school competition, the ratio of results to resources employed in outreach was very encouraging. Undoubtedly, the middle school competition is prospering from the increasing exposure of the high school competition and the veteran status of the media team.

### Releases created in support of the competition are as follows:

DOE's National Science Bowl Kicks Off This release marked the beginning of the Science Bowl outreach campaign and highlighted upcoming regional competitions as well the finals for both the high school and middle school competitions.



### Your Team is Coming to Golden

These releases were customized, providing school, student and teacher names to media in hometown markets. The releases were distributed to all of the 36 markets from which the teams originated.

### Satellite Feed Advisories

Envisioned as one release to announce the availability of "B-roll" from the finals competition, a last minute change to the satellite coordinates forced the distribution of a second, updated advisory. These advisories were sent to network affiliates from teams' home media markets and national network and cable news affiliates.

### Challenger School from Newark, Calif. Wins U.S. Department of Energy National Science Bowl® for Middle School Students

Directly following the announcement of a champion, a news release containing a photo of the Challenger School team was sent to all of the middle school media contacts and posted on the wire for national distribution. Using tactics employed for the high school event, a photo with caption of the Challenger School team was posted on the giant NASDAQ video screens in Times Square. Follow-up outreach was conducted to local media resulting in several stories, including a feature article with photo in the *San Jose Mercury News*.

### Media Coverage Breakdown

Media coverage was spread across the nation in multiple types of media. For the purpose of this report, we have defined national coverage as any article or report that discusses the national competition and those articles featured in top media markets. Regional coverage is focused exclusively on the regional competitions leading up to the National Finals.

### Online

Online media accounted for 52 percent of total media coverage. Online versions of regional newspapers and TV stations in markets such as San Francisco, CA, Amarillo, TX, Jackson, MS and Buffalo, NY ran stories on the regional and national winners. Postings of DOE media releases on Web sites like Forbes.com and LAtimes.com resulted in huge increases in media impressions.

### Television

Television coverage represented seven percent of total media coverage this year. While this is a decrease in the percentage of coverage attributed to television compared to last year's results, the number of television hits actually increased. Television coverage varied from short news clips to longer feature stories on teams that placed in the upper echelon of the competition. Stories ran in markets such as Denver, Amarillo, Boise and Jackson.

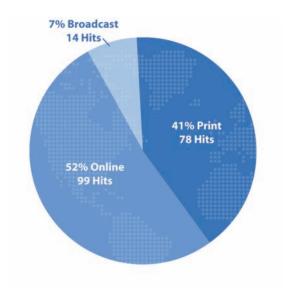
### Print

Print coverage of the National Science Bowl for middle school students accounted for 41 percent of total media coverage. Print outlets such as the *San Jose Mercury News, Buffalo News, Amarillo Globe News* and *Virginian-Pilot* covered the competition. Stories ranged from brief updates on teams making the trip to Golden to feature pieces on the regional and national winners.

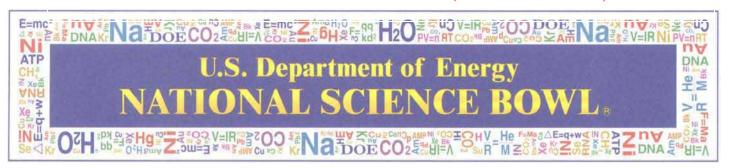
### Radio

As with the high school Science Bowl, radio covered both the regional and national competitions but is not easily measurable so largely was not tracked. VMS Monitoring Service (which was used for the campaign) tracks radio in a handful of top markets and the coverage included in this report reflects radio hits in markets across the country.

### Breakdown of Total Media Coverage Total Hits: 191



### SAMPLE 2008 MEDIA ADVISORY (BEFORE EVENT)



### **Celebrating 18 Years of Competition**

FOR IMMEDIATE RELEASE

Media Contacts: No Name, (XXX) xxx-xxxx

### [Number] Area Middle Schools to Compete in DOE National Science Bowl® for Regional Title

Winning Team Will Compete in National Finals in Golden, CO

City, ST – Date – ## teams of middle school science and math students from the [name] Area will compete this Saturday for the [Regional Name] in the U.S. Department of Energy's (DOE) National Science Bowl<sup>®</sup> for middle school students. Many of these teams have spent months preparing for the event that features head-to-head competition in a fast-paced question and answer format similar to *Jeopardy*. The students will be quizzed on science disciplines including biology, chemistry, earth science, physics and astronomy, as well as math. *Below is a sample question:* 

Question: A solid compound whose internal structural pattern is expressed as plane faces that can be seen with the unaided eye is generally known as...

Answer: Crystal

WHO: List school names if possible

WHAT: DOE's National Science Bowl regional competition for middle school students

WHERE: Location

**WHEN:** Day and Time

The winning team will receive an all-expense-paid trip to Golden, CO, to compete against 38 other regional winners in the DOE National Science Bowl Finals which will take place June 19 - 22, 2008.

This year more than 5,000 middle school students from 30 states will compete in the DOE National Science

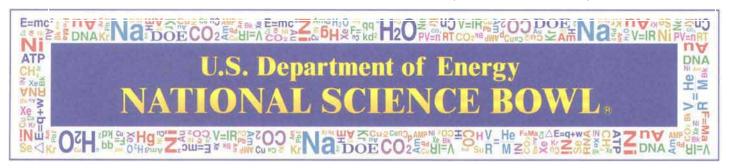
Bowl's regional competitions for middle school students. Since 2002, approximately 10,000 students and teachers have participated.

###

### About DOE's National Science Bowl®

The U.S. Department of Energy (DOE) launched its National Science Bowl® competition in 1991. The DOE National Science Bowl's high school competition now involves more than 12,000 students. DOE introduced the National Science Bowl's competition for middle school students, which presently involves more than 5,000 students, in 2002. By participating in National Science Bowl competitions, students are encouraged to excel in science and math and to pursue careers in those fields, which will help develop the workforce that America requires to remain at the forefront of scientific advances, technological innovation and economic competitiveness. For more information, please visit <a href="http://nationalsciencebowl.energy.gov">http://nationalsciencebowl.energy.gov</a>.

### SAMPLE 2008 PRESS RELEASE (AFTER EVENT)



### **Celebrating 19 Years of Competition**

FOR IMMEDIATE RELEASE

Media Contacts: Name, Phone number

### School's name Wins Region Regional Title in DOE National Science Bowl®

Winners Will Compete in National Finals in Washington, DC

<u>Number</u> teams of high school science and math students from <u>State(s)</u> competed today. Many of these teams spent months preparing for the DOE National Science Bowl's regional competition, which features head-to-head competition in a fast-paced question and answer format similar to *Jeopardy*. The students were quizzed on all science disciplines including biology, chemistry, earth science, physics and astronomy, as well as math.

This year more than 12,000 high school students from 1,800 schools in 42 states will compete in the DOE National Science Bowl's regional competitions for high school students. Since 1991, more than 130,000 students and teachers have participated.

###

PHOTO CAPTION: From left to right, Students' and coach's names.

### About DOE's National Science Bowl®

The U.S. Department of Energy (DOE) launched its National Science Bowl® competition in 1991. The National Science Bowl's high school competition now involves more than 12,000 students. DOE introduced the National Science Bowl's competition for middle school students, which presently involves more than 5,000 students, in 2002. By participating in National Science Bowl competitions, students are encouraged to excel in science and math and to pursue careers in those fields, which will help develop the workforce that America requires to remain at the forefront of scientific advances, technological innovation and economic competitiveness. For more information, please visit <a href="http://nationalsciencebowl.energy.gov">http://nationalsciencebowl.energy.gov</a>.

### RULES DIFFERENCES BETWEEN HIGH SCHOOL AND MIDDLE SCHOOL EVENT

To simplify volunteer training and planning for both a middle school and high school event, the rules for the academic science bowl competition have been kept almost the same, with the following few differences:

- 1. Both have different ages for eligibility.
- 2. MSSB has 5 question categories; NSB has 7 categories (see rule #8). The question difficulty is different based on level.
- 3. After round robin at the national events, teams advance to a seeded double-elimination tournament. The selection of teams advancing is a different process. Middle school team tiebreaks are decided by process in rule #43. High school team tiebreaks are decided by outcome of the Division Team Challenge.

### **RULES CHANGES IN 2009**

### **Eligibility Requirements**

Rule 3 – Clarification on team invited to nationals

Rule 4 – Clarification that team must participate in events as scheduled and not ask for rescheduled activities.

### **Competition Structure**

Rule 7 – Rewording

### **The Questions**

Rule 10 – correct answer can be as read by moderator

Rule 13 – first response counts, including adding unnecessary words, such as "My answer is..." \*Please note – this is the most important change this year. Please emphasize during volunteer training.\* It means that if a student begins their response with "My answer is" or "The answer is," they are wrong because it is their first words.

### **Challenges**

Rule 30 – Clarification so that teams can not challenge the last question of the first half in the second half of the game.

31 – add that player cannot challenge whether a player has given a first response

### **Rules for the End at National Event**

Rule 43 and 44 – Both middle school and high school national rules have been added.

### 2009 National Science Bowl<sup>®</sup> Official Academic Competition Rules

Changes and clarifications in bold/italic

### **Eligibility Requirements**

1. Each competing team consists of four or five student members (only four will be playing at any time). To be eligible to compete, a *high school* student must be enrolled for the current school year in grades nine, ten, eleven or twelve at the team's school, and be less than 20 years of age or receive a special waiver from the Department of Energy. To be eligible to compete, a *middle school* student must be enrolled for the current school year in grades six, seven, or eight at the team's school, and be more than 10 years of age and less than 15 years of age, or receive a special waiver from the Department of Energy.

Teams of home school students, girl scouts, boy scouts and science clubs are welcome to participate; however, if the school a student attends is competing in a Regional Science Bowl, then that student may compete only on a team from that school.

- 2. No school or student group may compete in more than one regional competition. No student may compete on more than one team. Each regional coordinator will determine if more than one team from a high school will be allowed to participate in that regional as well as the geographic area their regional will encompass. No more than 3 teams from one high school or student group may compete in a regional event.
- 3. To be eligible for the National Science Bowl® finals, a student must have competed on the team that won the Regional Science Bowl or on *the next highest place team that accepts the invitation* if the first place team declines to attend. The winning team from each regional tournament is eligible to be invited to participate at the National finals April 30 May 5, 2009.
- 4. By March 11, 2009, the winning team's coach is required to inform the National event coordinator of its availability to participate at the Nationals. During this time of the school year, students are participating in a variety of activities and academic events that may conflict with their participation in the National Science Bowl® (including, but not limited to, state athletic tournaments, proms, International Baccalaureate, Advanced Placement and SAT exams). In the interest of safety, continuity, and educational value, the National Science Bowl® requires students to take part in ALL of its events and activities. Therefore, no waivers will be granted or special arrangements made for students to participate in any conflicting activities or exams. If team members are involved in these pursuits, the students will need to determine which activity or event is in their best interest and make their selection by March 11, 2009. All teams must arrive and depart on the designated dates and participate in all events, as scheduled throughout the duration of the National Event, including Saturday and Sunday. If the winning regional team (at least 4 students) is unable to

participate at all activities, **at all scheduled times**, the next highest place team will be invited to replace them.

### **Competition Structure**

- 5. Regional competitions have the option of choosing their tournament style, e.g. only double elimination, only round robin, or a combination of both.
- 6. The National finals will use a round robin tournament format with several divisions for the preliminary rounds. For the preliminary rounds at the Nationals, teams will be placed in divisions by drawing lots, with the number of teams per division as equal as possible. The number of teams in each division will depend on the number of teams participating in the competition. Each team will play every team in its division. At the end of each round robin match, regardless of the overall score, two points are awarded for a win, one point for a tie, and zero points for a loss. The top 2 teams from each round robin division will move on to the seeded double elimination tournament.
- 7. **For games that occur in the elimination tournaments,** if the score is tied at the end of the regulation time period, a series of five toss-up questions will be used to break the tie. Interrupt, blurt, and consultation penalties are in effect during tie-breaker.

### **The Questions**

- 8. Two types of questions will be used: toss-up and bonus questions. A toss-up question may be answered by any of the four members of either team that are actively competing. A team answering a toss-up question correctly will always get a chance to answer a bonus question; the other team is ineligible. No consultation is allowed on toss-up questions. The *high school* question categories are: astronomy, biology, chemistry, earth science, general science, mathematics, and physics. The *middle school* question categories are: life sciences, physical sciences, earth sciences, mathematics and general science.
- 9. No team will have more than one opportunity to answer a toss-up question.
- 10. Questions are either multiple-choice or short answer. A participant may answer a multiple-choice question with either the letter answer (W, X, Y or Z) or the verbal answer; however, if the verbal answer is given, it must be exactly as indicated in the question *or as read by the moderator*. The only acceptable answer to a multiple-choice question will be the best of the four choices indicated in the question.
- 11. Once read in its entirety, a question will not be re-read.
- 12. For toss-up questions, the first player on either team to activate the lock-out buzzer system wins the right to answer the question, except that no player may buzz in until AFTER the moderator has identified the subject area of the question. If a player buzzes in prior to the reading of the subject area, the moderator will inform the player

that he/she has buzzed in too soon. The moderator may add time back to the clock, if necessary.

- 13. On any question, the first *response given, as determined by the officials,* is the only one that counts. However, if a participant gives both a letter answer and a scientific answer to a multiple choice question, both parts must be correct.

  Note: This includes any response not directly answering the question, for example: "my answer is" or repeating the question.
- 14. If the first team's answer to a toss-up question is wrong and the question was completely read, the other team is given the opportunity to answer it. The second team is allowed a full 5 seconds to buzz in after the moderator indicates the answer is wrong or that a blurt or consulting has occurred.
- 15. The answer to a bonus question must come from the team's captain, including when the question has been interrupted. Moderators should ignore an answer from anyone but the captain on the bonus question.

### **Verbal Recognition & Consulting**

- 16. Before answering a toss-up question, the team member who has buzzed in must be verbally recognized by the moderator or scientific judge. (Before the match, the official **who will be** recognizing participants will be identified.) If a student was not recognized, it is treated as a non-answer (blurt) and the moderator will award 4 points to the opposing team, but will not indicate whether the answer was right or wrong. The toss-up question is then offered to the opposing team, if still eligible. If the question has not been completely read, the question is reread in its entirety, and the opposing team has an opportunity to answer the toss-up question, and, if correct, a chance to answer the bonus question.
- 17. On toss-up questions, no consultation among team members may occur. Prior to buzz: Should consultation among any of the team members occur without a team member buzzing in, or if any team member should give an answer without buzzing in, any answer given does not count, the moderator will not indicate whether the answer given was correct or incorrect, and the team loses the right to answer the toss-up question. The question is then offered to the opposing team, if still eligible. After a buzz: If consulting occurs, the consulting is then classified as a blurt as in previous rule, and 4 penalty points will be awarded to the opposing team.

### **Timing**

18. The match is played until either the time expires or all of the toss-up questions (and earned bonuses for correct toss-ups) have been read. Regional competitions will have two 8-minute halves with a 2-minute break (halves at the Nationals are 10 minutes). Each half begins with a toss-up question.

- 19. After reading a toss-up question, the moderator will allow 5 seconds for the two teams to respond before proceeding to the next toss-up question. Timing begins after the moderator has completed reading the toss-up question.
- 20. A participant who has buzzed in on a toss-up question must answer the question promptly after being verbally recognized by the moderator or scientific judge. After recognizing a participant, the moderator will allow for a natural pause (up to 3 seconds), but if the moderator determines that stalling occurred, it will be treated as a wrong answer.
- 21. After a team member has answered a toss-up question correctly, the team is given the opportunity to answer a bonus question. The team will have 20 seconds for its captain to begin to give its answer to the bonus question. Consultation among team members is allowed on bonus questions.
- 22. On a bonus question, the signal "5 SECONDS" will be given by the timekeeper after 15 seconds of the allowed 20 seconds have expired. Additionally, the timekeeper will indicate the end of the 20-second bonus period by saying "TIME." If the team captain has not begun the response before the timekeeper calls "TIME," the answer does not count. If the team captain has begun the response, he/she may complete the answer, but may not stall.

### **Scoring**

- 23. Toss-up questions are worth 4 points, and bonus questions are worth 10 points.
- 24. If a toss-up question is interrupted, the player recognized, and the answer correct, the team will receive 4 points. If the answer is incorrect, or if a player from the team buzzing in answers without being verbally recognized, or if consultation occurs on the team buzzing in, 4 points are added to the opposing team's score, the question is reread in its entirety, and the opposing team has an opportunity to answer the toss-up question, and, if correct, the chance to answer the bonus question.
- 25. The double interrupt. If a toss-up question is interrupted and a team incurs a penalty as in the previous rule, 4 points are added to the opposing team's score. The question is then reread in its entirety. However, if the opposing team interrupts the re-reading and subsequently incurs a penalty as in the previous rule, 4 points are added to the first team's score. The moderator will give the correct answer and move on to the next toss-up question.
- 26. If the moderator inadvertently gives the answer to a toss-up question without giving either team a chance to respond, no points are awarded and the moderator goes on to the next toss-up question.
- 27. If the moderator inadvertently gives the answer to a toss-up question before allowing

the second team to respond (after an incorrect answer, or an answer given without the team member having been recognized) the next toss-up question will be read to the second team in place of the inadvertently answered question. If this situation occurs on question #25, the officials will obtain a replacement toss-up question.

- 28. On a toss-up question, if the moderator inadvertently recognizes a player other than the one who buzzed in, the player who buzzed in will be allowed to answer as though he/she had been correctly recognized.
- 29. On a bonus question, if the moderator inadvertently responds to someone other than the captain while indicating whether an answer is correct, the next bonus question will be read to the team eligible for the bonus. If this situation occurs on question #25, the officials will obtain a replacement bonus question.

### **Summary of Scoring**

Type of Question	Points Awarded
Correct Toss-up Incorrect Toss-up	+4 points & eligible for bonus +0 points
Correct Bonus Incorrect Bonus	+10 points +0 points
Interrupted Toss-up: - Correct Answer - Incorrect Answer	+4 points & eligible for bonus +4 points to opposing team
After a team member buzzes in: - Unrecognized Toss-up (Blurt) - Unrecognized Interrupted Toss-up (also a Blurt) - Consultation among players	+4 points to opposing team
Before a team member buzzes in: - Answering a toss-up - Consultation among players	+0 points but team will be disqualified from toss-up

### **Challenges**

- 30. Challenges must be made before the moderator begins the next question, or *for the last question of a half, within three seconds of the end of that half*. All challenges must come from the four members of each team who are actively competing. The fifth team member and/or the coach may not object verbally or by signal. If either the fifth team member or the coach objects verbally or by signal to the active team members, the challenge will not be allowed. All decisions of the judges are final.
- 31. Challenges may be made either to scientific content or to the application of the rules. Challenges may NOT be made to judgment calls by the officials, including but not limited to whether a question has been interrupted, whether 5 seconds have elapsed before a student buzzes in on a toss-up, whether 20 seconds have elapsed before a captain begins answering a bonus, whether a half has expired before a new toss-up question begins, whether a stall or consultation has occurred, *a player has given a first response*, or whether time should be added back to the clock.
- 32. Should a question or challenge arise during a competition, the competition and the clock will be stopped until the question is resolved. Once the question has been resolved, the match will continue from that point. Should the moderator decide that some time was lost due to the interruption in play, the moderator has the right to put the appropriate amount of time back on the clock.
- 33. If a team's answer to a toss-up question is judged incorrect, and they wish to challenge the ruling on the basis of scientific content, but the opposing team is still eligible for the toss-up, the first team should hold its challenge until after the opposing team has completed its toss-up opportunity. The first team should then state its challenge before the next bonus or toss-up question is read. If the challenge is upheld, the second team's answer will be disregarded and the time lost since the first team's answer was disallowed will be put back on the clock. The first team will then have the opportunity to answer the bonus question.

### When Time Runs Out

34. If a toss-up question is begun before time expires in a half, that question will be finished under the usual rules of play, including the bonus if the toss-up is answered correctly. The half is then over. A question will be considered to have been begun if the subject area has been completely read. The second half will begin with the first toss-up question not read in the first half.

### Miscellaneous Rules

- 35. Substitutions may be made only at the half. If a team has five players, the player who did not play in the first half may substitute for any of the four starters. Teams may switch captains, but only at the half.
- 36. No one in the audience may communicate with participants during the match; communication will result in ejection from the competition room.
- 37. If someone in the audience shouts out an answer, the question will be thrown out (as will the person) and the moderator will proceed to the next question.
- 38. Prior to each match, the two team coaches will introduce themselves to each other and will sit together in the back row of the competition room.
- 39. No notes may be brought to the competition table. Nothing may be written before the clock starts. Scratch paper will be provided at the beginning of each match and collected at half-time and at the conclusion of the match.
- 40. Calculators are not permitted.
- 41. Members of the audience, including the *teams and* coaches, will not write down the questions/answers the moderator reads or use any electronic recording or transmitting device, including digital cameras, cell phones, or computers during the match. At the Nationals, coaches will be provided with a team score sheet to track the number of questions answered by each individual student on their team. No one else in the competition room is permitted to write or make notes of any kind during the active competition. If this occurs, the individual(s) will be asked to leave the competition room.

### Rules for the End of Round Robin Tournaments at Regional Events

- **42.** At the regional events at the end of Round Robin: A tie-break procedure in the following order will be used to determine teams that advance to the elimination tournament:
  - (I) Head to head won/loss record
  - (ii) Fewest losses
  - (iii) If two (2) teams are still tied, there will be a five toss-up question run-off (interrupt penalty in effect). No bonus questions will be used during this segment of the competition. If still tied, another five toss-up question run-off will be used, etc. until the advancing team is determined.
  - (iv) If more than two teams are tied, each team, in separate rooms, will be

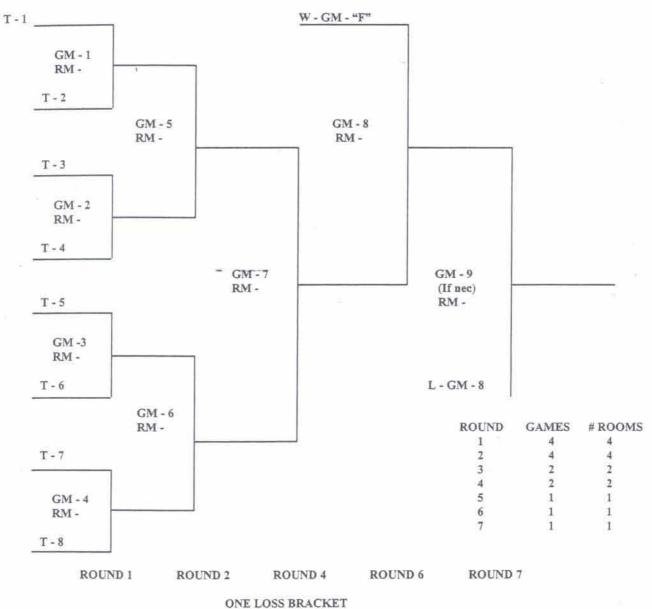
given a series of ten toss-up questions (no bonus questions will be used during this segment of the competition). The usual five (5) seconds will be allowed for a competitor to buzz in after the question is completely read. There are no interrupt penalties but also no reason to interrupt since all ten questions will be read. Scoring will be based on the number of questions right minus the number wrong. If two or more teams are still tied, procedure (iii) or (iv), as appropriate, will be used until the advancing teams are determined.

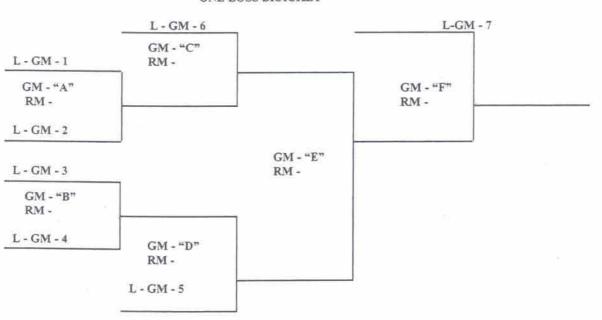
### Rules for the End of Round Robin Tournaments at National Event

- **43.** At the National finals for *middle school*: Ties for positions 1 and 2 in each Division will be broken using the following rules in the given order until ties are broken:
  - (1) If each team involved in the tie has played every other team involved in the tie or if a team involved in the tie has defeated every other tied team or lost to every other tied team, head-to-head results in the round-robin tournament will be used. If more than two teams are tied, records in all games involving two of the tied teams will be used. If one or more teams receive a position or are otherwise separated above or below the rest of the group, remaining tied teams will be compared again using only those games involving two of them.
  - (2) If all teams involved in the tie will qualify for the double-elimination tournament, coin flips will be used to break ties. If three or more teams are involved, coins will be flipped until an "odd man" wins, with the remaining teams flipping again until all ties are broken.
  - (3) If more teams are involved in the tie than will qualify for the double-elimination tournament, a set of tie-breaker questions will be used, consisting of toss-up questions only. If two teams are tied, the teams will play against each other with a set of five questions, with the usual timing and scoring rules in effect, including the interrupt and blurt penalties. If more than two teams are tied, each team will be given the same set of ten questions in separate rooms, with usual timing rules in effect and scores of +1 for each correct answer, -1 for each incorrect answer, and 0 for each unanswered question. If one or more teams either advance or are eliminated, remaining ties will broken by first reverting to rule (2) above.
- **44**. **At the National finals for high school:** In the event of ties for the two positions from each round robin division to qualify for the double elimination tournament, the rankings of the teams in the Division Team Challenge will be used to break the tie.

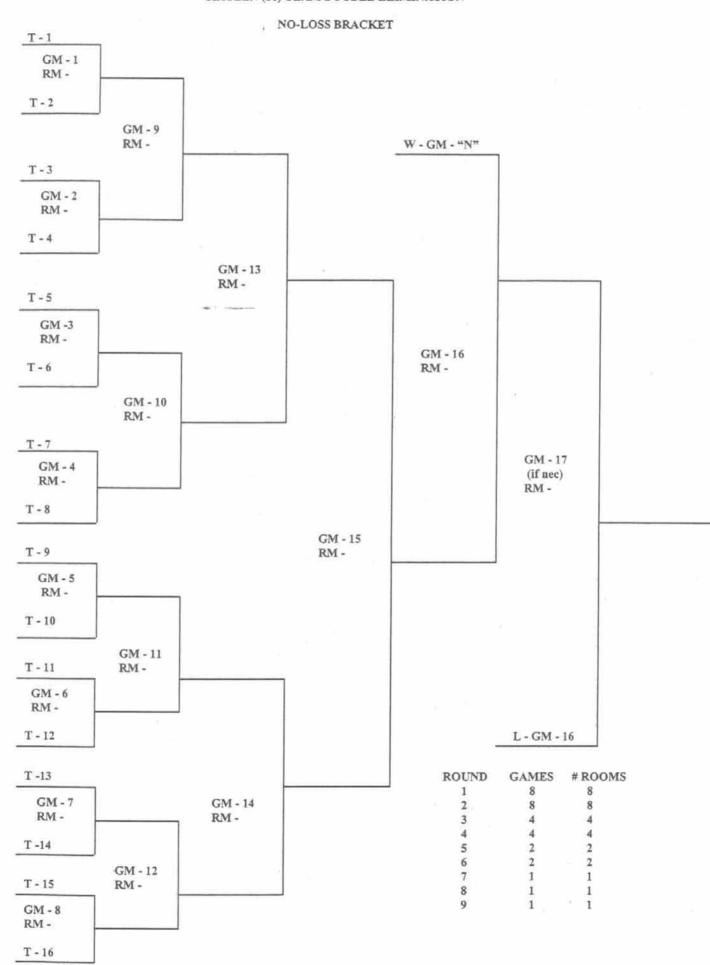
### EIGHT (8) TEAM DOUBLE ELIMINATION

### NO-LOSS BRACKET





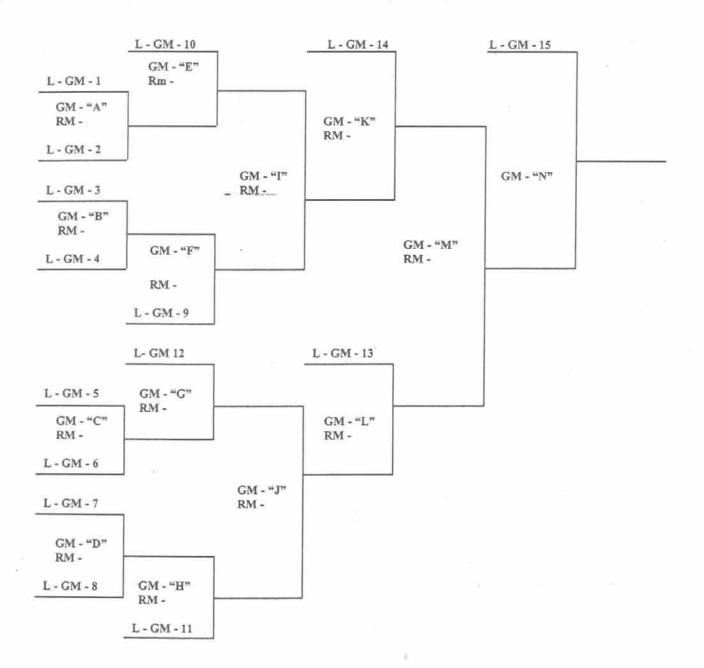
ROUND 2 ROUND 3 ROUND 4 ROUND 5



ROUND 1 ROUND 2 ROUND 4 ROUND 6 ROUND 8 ROUND 9

### SIXTEEN (16) TEAM DOUBLE ELIMINATION

### CHALLENGERS BRACKET



ROUND 2 ROUND 3 ROUND 4 ROUND 5 ROUND 6 ROUND 7

### DIVISION WITH FIVE (5) TEAMS

TEAM	1	2	3	4	5	TOTAL POINTS
1						
2		WEST TO				
3						
4						
5						

ROUND	TEAMS ROOM A	TEAMS ROOM B	BYE TEAM
1	1 vs 2	3 vs 4	5
2	1 vs 3	2 vs 5	4
3	1 vs 4	3 vs 5	2
4	1 vs 5	2 vs 4	3
5	4 vs 5	2 vs 3	1

### DIVISION WITH SIX (6) TEAMS

TEAM	1	2	3	4	5	6	TOTAL POINTS
1							
2							
3		*					
4							
, 5					100 T		
6							

ROUND	TEAMS ROOM C	TEAMS ROOM D	TEAMS ROOM E
1	1 vs 2	3 vs 4	5 vs 6
2	1 vs 3	2 vs 5	4 vs 6
3	1 vs 4	3 vs 5	2 vs 6
4	1 vs 5	2 vs 4	3 vs 6
5	4 vs 5	2 vs 3	1 vs 6

### VOLUNTEER OVERVIEW

Many types of volunteers are needed to run each science bowl event. It is recommended that you recruit and train volunteers in advance, so that the event runs smoothly. At training, you can photocopy the handouts in this section and share with the volunteers.

In addition to the volunteers helping at registration, Science Bowl Central, and to do various other activities, there are "teams" of 5 volunteers in each competition room during the tournament. Regional coordinators can decide to have less than 5 volunteers if there are not enough people. If you have four volunteers, the scientific judge can sometimes serve as a rules judge. There are other options, as long as the rules are followed and the teams can participate fairly.

The typical competition room has 5 volunteers:

- Moderator
- Scientific Judge
- Scorekeeper
- Rules Judge
- Timekeeper

There are also volunteers to run scores to Science Bowl Central, to serve food, to clean up and set up, etc. Since training is not necessary for these roles, it can be a good fit for a middle school student or younger student who might need to earn service hours.

The science bowl appeals room will need either dedicated science experts or rotating Moderators and Scientific Judges.

At volunteer training meetings, it is a good idea to get them to practice the game with some older questions. Some regional sites hold a moderator audition, where volunteers practice reading questions. Practice sessions are more informative than handouts or lectures, because science bowl is a learned activity. On the enclosed CD is a sample volunteer training Power Point presentation and a sample game on knowing the rules of science bowl. (Be sure to check/edit so that it reflects current rules.)





### **MODERATOR**

The Moderator is <u>THE</u> person responsible for controlling each match. It is important that you are familiar with how the game is played and all of the contest rules. It is, therefore, extremely important that you review the rules well in advance of the actual event.

The Science Bowl is an oral competition in which two student teams attempt to answer toss-up and bonus questions. Each regional competition round is divided into two eight-minute halves with a two-minute break.

- 1. The first half begins as soon as the Moderator begins the first toss-up question. Before reading the question, the Moderator identifies: 1) whether it is a toss-up or bonus question, 2) the subject area, and 3) whether it is multiple choice or short answer. If a contestant elects to answer the toss-up question, he/she activates the lock-out system (an electronic device which "locks out" all other contestants and identifies the student who wishes to answer the toss-up question). You or the scientific judge will then **verbally** recognize the student. Should the student answer the toss-up question correctly, the student's team receives 4 points and is awarded a bonus question. A correct answer to the bonus question results in the team's receiving an additional 10 points. Play then continues by reading the next toss-up question to the two teams.
- 2. As a toss-up question is read, a student may interrupt the reading of the question. If you **verbally** recognize the student and he/she answers correctly, that team is awarded 4 points, and the team wins the right to answer a bonus question. If the student interrupts the question, is **verbally** recognized, but answers the toss-up question incorrectly, 4 points are awarded to the opposing team and the question is read in its entirety to the opposing team. That team may answer the toss-up question for a chance at the bonus.
- 3. A student **MUST** wait to be **verbally** recognized by the Moderator before beginning to answer the toss-up questions. If a student answers a toss-up before being verbally recognized, the response is ignored (i.e., you should <u>not</u> reveal whether the answer was correct or incorrect), then the opposing team is given 4 points and is offered the toss-up question. This rule is necessary to avoid situations where two team members think they have activated the lock-out system and blurt out simultaneous answers. If the student answers without buzzing, ignore the student and there is no penalty.
- 4. The game is over when the second half ends or when 25 toss-up questions have been read. The winning team is the one with the greater point total.

You will be provided with the questions for your games well in advance of the actual event. It is important that you read all the questions before the competition to help ensure that you are able to read them smoothly and to allow you to make certain of all pronunciations of scientific terms.

The Moderator completes the official score sheet for every match.





# MODERATOR

What DO I Do

### 1. Introductions

- Introduce officials.
- Ask students to introduce themselves.
- Ask coaches to shake hands,

introduce themselves, and to sit together in back of room.

## 2. Reading the Questions

- Announce whether it's a toss up or bonus question.
- Announce question category.
- Announce whether multiple choice or short answer
  - Read that question.

### 3. Who Won?

Fill out official score sheet and get signatures.



Note: At the end of each match, the official score sheet should be signed and put in the corresponding round-numbered envelope. The packet should then, immediately, be taken to SBC by the Runner or official who will be going to SBC first.

# Keep in Mind .....

### Toss-Up?

No consultation (Shhhhhhhhh) among team members.

allowed, but the Consultation is captain must answer.

> Radium, -- No wait, I mean Radon!

The FIRST answer Sorry, Charlie.

(The FIRST answer always counts.) Counts

Challenge?

Ask timekeeper to

stop the clock

# Minimum Requirements:

- Be able to articulate clearly and maintain a good pace
  - Know and be able to apply all of the rules
- A science, engineering, math, or teaching background Read and review the questions prior to the event
  - Be at least a junior in college

### "SCIENCE BOWL IMPORTANT RULES"

(This is optional to read before matches; it will not be read before the matches at the national event.)

The Moderator must read the following before Round Robin Rounds 1 and 2. After these rounds, please give the teams the option of hearing the reading of the "Important Rules."

Before we get started, I would like the coaches of both teams to come forward. Please introduce yourselves, shake hands, and sit together in the back row. Now I will introduce the officials. Students, please introduce yourself and test your buzzer.

REMINDER: Tell the teams who will be verbally recognizing them – the Moderator OR Scientific Judge.

Please let me remind you of several important rules we will be carefully observing during this match.

- 1. On toss-up questions, you MUST be **verbally** recognized by the *Scientific Judge* before replying. The Scientific Judge will identify you by saying either Team "A One," "A Captain," or "B One," "B Three," etc.
- 2. On toss-up questions, there can be no conferring among team members **ON EITHER TEAM** at **ANY** time.
- 3. The only acceptable answer to a multiple-choice question will be one of those read by the moderator. If you give the scientific answer rather than the letter (W, X, Y, or Z), your answer must be **exact**.
- 4. On any question, the first response given, as determined by the officials, is the only one that counts. This includes any response not directly answering the question, for example: "my answer is" or repeating the question.
- 5. **Challenges must be made before I begin the next question.** All challenges must come from the team members who are actively competing.
- 6. On bonus questions, you have 20 seconds **AFTER** I finish reading the question to begin your answer to the question. If you fail to begin your answer before the Timekeeper says, "TIME," you have missed your bonus question. You will hear the Timekeeper say, "5 SECONDS," when you have only 5 seconds left to begin your answer.
- 7. On the bonus question, only the team captain's answer will be accepted.
- 8. At the conclusion of each match, the two captains need to review and sign the Official Score Sheet. By signing the score sheet, each team captain is agreeing to the final score as written on the Official Score Sheet.

### **2009 Science Bowl**

### OFFICIAL SCORESHEET

MODI	ERATOR						
1.	Record the names of the schools that will be participating in this match at the bottom of this sheet. Complete the other information as well.						
2.	Introduce yourself and the other officials.						
	SCIENTIFIC JUDGE						
	RULES JUDGE						
	TIMEKEEPER						
	SCOREKEEPER						
3.	Check the lock-out system by having each student introduce him/herself.						
4.	Record final scores in the space provided below.						
5.	See that the Rules Judge PICKS UP ALL PAPER at the half and at the end of the round! The students are NOT to take their scratch work out of the competition room.						
6.	Please have an official take this Official Scoresheet to the Scorers Room.						
SCHO	OOLFINAL SCORE						
SCHO	OOLFINAL SCORE						
COMI	PETITION ROOM ROUND DIVISION						
WINN	NING SCHOOL						
	By signing this form, you are accepting the final score of this match AS WRITTEN above on this sheet.						
Captai	in, Team A						
Cantai	in Team B						

### **SCIENTIFIC JUDGE**

The questions in each subject area have been reviewed by at least two individuals with subject expertise to eliminate erroneous or ambiguous questions. In addition, we have selected a multiple-choice format for many of our questions. This ensures against there being more than one correct answer (it's either one of our answers or the response is wrong).

1. Your primary duty as a Science Bowl SCIENTIFIC JUDGE is to resolve question challenges.

Should a question be challenged, there are a number of steps that should be followed:

- First, see that the competition clock is stopped.
- Then, please bring the challenge to "Science Bowl Central." The organizing committee will either have someone on call or in the building in each of the math or science areas who can resolve the issue. **Once you report a decision, that decision is final.**
- Should you feel that time was lost as a result of the interruption (5, 10, or 15 seconds, for example), check with the Moderator who may add that time back onto the clock before resuming the competition. Be certain to announce that you are "correcting" the time because time was lost due to the interruption so that all participants understand what is happening.
- 2. The Scientific Judge controls the buzzer lock-out system.
- 3. The Scientific Judge may also verbally recognize the student in place of the Moderator. This duty should be determined by the Moderator and Scientific Judge before the match and should be consistent for the whole match.
- 4. **Ensuring that the Moderator has read each question correctly:** You will be given a packet of questions identical to those of the Moderator. As the Moderator reads a question, please follow along to make sure the question is read correctly and that all words are pronounced correctly.





# SCIENTIFIC JUDGE What DO

 $I D_0$ 

- 1. Follow questions read by moderator (ensure correct pronunciation).
- 2. Control buzzer system.
- Wait to turn the flashing light off after the student has been recognized.
- 3. Getting the Answer
- •Verbally recognize the individual before she/he responds.

Competitor 2 Team A,

- Identify student by....
- 1) announcing Team A or Team B and
- 2) announcing participant ID (captain, 1, 2, 3)



### 3. Challenges

- Along with Moderator, request that clock be stopped during challenges.
- All challenges go to the Appeals Room.



# Minimum Requirements:

- Be able to follow the competition flow
- Know and be able to apply all of the rules
- A science, engineering, math, or teaching background
- Read and review the questions prior to the event
  - Be at least a junior in college

### **SCOREKEEPER**

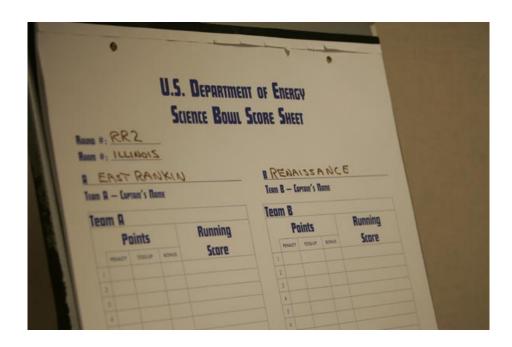
Your duty as a Science Bowl SCOREKEEPER is to:

1. **Accurately award points and record the competition score.** Scores will be recorded on a blackboard or easel that should be visible to all contestants and Science Bowl officials. The point awards are: 4 points for each correctly answered toss-up question and 10 points for a correctly answered bonus question.

The only variations to the above are: (1) when a contestant buzzes in and INTERRUPTS a toss-up question while it is still being read, is recognized, and gives the wrong answer; or (2) when a contestant buzzes in and gives an answer before being recognized ("blurt"). **4 points** are awarded to the opposing team. The opposing team then has the opportunity to answer the interrupted question after it is read in its entirety and, if it answers the toss-up correctly, receives another 4 points for the toss-up question and is then asked the bonus question.

As you keep track of the score on the scoresheet or blackboard, two columns should be recorded for each team. In the first column, **record the points a team receives on each individual question,** with toss-up, interruption, and bonus points being recorded separately. The second column should contain a **running total** of the team's points. If recorded in this fashion, the point total can be checked at the end of the round.

2. **Post-game.** Announce the scores and help the Moderator complete the official scoresheet.







# SCOREKEEPER What DO 9

I Do

- 1. Set up score sheet on flipchart.
- 2. Understand where to place points
- Use a cumulative tally
- Scoring

ઌ૽

- loss up questions = 4 points
- Bonus questions = 10 points
- Penalty = 4 points
- 4. If a competitor interrupts the Moderator while a question is being read, and if the competitor answers incorrectly, the opposing team:
- Is awarded 4 points
- Has a chance to answer the toss up question (for an additional 4 points)
- Has a chance to answer the bonus question (for an additional 10 points)

This is also true for unrecognized answers or 'blurts.")

### 5. At halftime

- Draw a double line with a total
- Announce scores for teams A and B.
- 6. At end of game
- Announce the final scores. Do NOT call.
- Sign the Official Score Sheet. Leave the flipchart score sheet in the comp room.

Team A	1 A		Team B	n B		
4	10	14	4		4	
4		18	4		12	

# Minimum Requirements:

- · Be able to perform basic math skills quickly and accurately
- · Be comfortable standing as needed during competitions · Be able to focus on the scoring in a competition setting
  - Be at least in eighth grade (depending on maturity)

### **RULES JUDGE**

Your duties as a Science Bowl RULES JUDGE include:

- 1. **Ensuring all competition rules are followed.** To serve in this capacity, it is imperative that you fully understand all competition rules. Please review the competition rules before coming to the Science Bowl training session.
  - During the competition, if you should have to discuss a rule with the Moderator during a round, please be certain that the clock has been stopped. If you feel that time has been lost, ask the timekeeper to make a time correction.
- 2. **Watching the teams and audience.** Stand near the front of the room to watch both teams for breaking the rules and the audience for signaling, recording questions, or distracting the teams or officials.
- 3. **Watching for Scorekeeper errors.** If, for example, Team A is supposed to get four points, the Rules Judge needs to make sure the Scorekeeper doesn't inadvertently credit the wrong team with those points.
- 4. **Ensuring that quiet is maintained.** During competition play, the Rules Judge is responsible for ensuring that quiet is maintained in the room and that no signals are given to the team members from the audience.
- 5. At the beginning of each half, check that all students have **blank scratch pads** and pencils. Collect any used scratch paper at the end of the half and discard.





# RULES JUDGE



1. Stand in front of the room facing the audience.

That's the last time you'll signal the atomic

number of Cesium!

2. Your role concerning rules:

- You are responsible for ensuring that the rules are followed.
- This includes ensuring that no one signals/communicates with the competitors during a match. If communication does occur, you have the authority to ask the person to leave the room (without causing undue duress -- please).
  - Ensure quiet.



- · If a rule is broken you may, at your discretion, give one warning.
- 4. Collect all used scratch papers from teams at the beginning of the match, at the half, and at the conclusion.
- 5. Time
- Ensure that the clock is stopped during discussions between officials, and between officials and students.



### Challenge?

• Ask timekeeper to stop the clock.

## Minimum Requirements:

- Know and understand all of the competition rules
- Be comfortable standing as needed during competitions

Be able to enforce the rules in a competition setting

Be at least a junior in high school (depending on maturity)

| Marie | Mari

### NATIONAL SCIENCE BOWL FOR HIGH SCHOOL STUDENTS - COACHES SCORESHEET

Subjects	$\mathbf{A} = \mathbf{Astronomy}$ $\mathbf{B} = \mathbf{Biology}$	$\mathbf{Ch} = \mathbf{Cher}$ $\mathbf{E} = \mathbf{Earth} S$			<b>G</b> = General Science <b>M</b> = Math	$\mathbf{P} = \mathbf{Physics}$
Types	MC = Multiple Ch	noice	SA = Shor	rt Answer		
Points	4 = Toss Up Cor 10 = Bonus Corre 4 = Interrupt Pen Awarded to 0	ct Answer	m	to assist of	Coaches: This scores coaches in tracking suons, and scoring. No still not allowed to w	bject matter, type
Team A				Team I	3	

	Tea	m A								
Question	Subject	Type	Captain	Player 1	Player 2	Player 3	Player <b>4</b>	Bonus Pts	Penalty Pts	Score
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13 14										
14										
15										
16										
17										
18										
19										
20										
21										
22										
23										
24										
25										

Tea	m B									
Question	Subject	Туре	Captain	Player 1	Player 2	Player <b>3</b>	Player <b>4</b>	Bonus Pts	Penalty Pts	Score
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13 14										
14										
15										
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19										
20										
21										
22										
23										
24										
25									l	

### NATIONAL SCIENCE BOWL FOR MIDDLE SCHOOL STUDENTS - COACHES SCORESHEET

Subjects	E = Earth Science	<b>G</b> = General Science	L = Life Science
	$\mathbf{M} = \mathbf{Math}$	<b>P</b> = Physical Science	
Types	MC = Multiple Choice	SA = Short Answer	

Points	<b>4</b> = Toss Up Correct Answer
	10 = Bonus Correct Answer
	4 = Penalty Points
	Awarded to Opposing Team

Note to Coaches: This scoresheet was developed to assist coaches in tracking subject matter, type of questions, and scoring. No other use is allowed. "You are still not allowed to write down questions."

Team A									
Question	Subject	Type	Captain	Player 1	Player 2	Player <b>3</b>	Bonus Pts	Penalty Pts	Score
1					,	,	, ,		
2									
3									
4									
5									
6									
7									
8									
9									
10									
11									
12									
13 14									
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									
24									
25									

### Team B

	_								
1 Question	Subject	Type	Captain	Player 1	Player 2	Player <b>3</b>	Bonus Pts	Penalty Pts	Score
1									_
2									
3									
4									
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									
13 14 15 16									
16									
17									
18									
19									
20									
21									
22									
23									
24									
25									

### **TIMEKEEPER**

Your duties as a Science Bowl TIMEKEEPER include:

1. **Operating the official competition time clock.** You will be provided with a clock that shows both minutes and seconds. At the beginning of each of the competition's halves, set the clock at 8 minutes (or 10 at the Nationals). If your site does not have separate competition clocks, you may use the clock in the competition room and make sure that both teams agree on when time will start. Both teams need to be able to see the clock. The clock should be started as soon as the Moderator begins to read the first question. The clock should be allowed to run uninterrupted until time expires UNLESS there is a question or a rules challenge. At half-time, call, "HALF" and at the end of the game call, "GAME."

If there is an interruption, stop the clock until the issue is resolved. Restart the timer when the Moderator begins reading the next question. Add time back onto the clock if the interruption has unduly used competition time. Again, be certain to explain to the participants that a time correction is being made.

- 2. **Keeping track of the time for bonus questions.** Each time a team correctly answers a toss-up question, the team will be awarded a bonus question. The students have 20 seconds to begin to answer the bonus question AFTER the Moderator has finished reading the bonus question. After 15 seconds in the bonus period have elapsed, please say, "5 SECONDS." This is to alert the students that only 5 seconds remain in their bonus period. At the end of the 20-second time period you will simply say, "TIME." Please say this loudly enough for all participants to hear. Generally, it will be sufficient for you to time the 20-second interval by reading the clock provided for the match. However, a stopwatch may also be used for this purpose.
- 3. **On toss-up questions,** one of the teams must answer within 5 seconds of the Moderator's completing the question. Keep track of the 5 seconds allowed, calling "TIME" so that the Moderator will know to proceed to the next toss-up question.
- 4. **At the conclusion of each half**, reset the clock.





# **TIMEKEEPER**



### 1. The basics ...

- It's very important to keep focused on the time -- NOT the game.
- One match is composed of two 8 minute halves at the Regionals.

### **Foss-up Question**





### 2. To begin ...

Timer begins the clock when the moderator starts reading the first question.

3. Students have 5 SECONDS to answer a toss up question.

After 5 SECONDS, announce "TIME!"

4. Students have 20 SECONDS to answer a bonus question.

After the total 20 seconds are complete, announce "TIME!" After 15 seconds, announce "5 SECONDS!"

5. If there's a challenge, stop the clock.



### Challenge?

15 seconds - "5 SECONDS" 20 seconds - "TIME"

**Bonus Ouestion** 

• Stop the clock.





### 7. Break and final time

· Track additional time on your watch, then start the game clock after that time has lapsed.

The clock cannot move backwards.

6. Adding time

- After the first half has lapsed, announce "HALF!"
- Time the 2 minute break between halves.
- After the second half has lapsed, announce "GAME!"
- 8. Know the rules.

# Minimum Requirements:

- Know and understand the timing rules
- · Be able to focus on timing in a competition setting
- Be at least a junior in high school (depending on maturity)

| Pan. |

#### **REGIONAL FORMS**

#### **Team Registration Form - Required**

The registration form is on a secure Web site.

Coaches go to the website and create an account in order to register a team(s) for the regional event. Repeating coaches will need to create a new account each year. Coordinators should help the coaches in their region with any computer glitches; however, the DOE HQ staff are available as a backup resource. The online system allows regional coordinators to download a spreadsheet of their teams and keep track of dates when forms were submitted.

Immediately following the regional event, coordinators select the winning team's name to indicate to DOE-HQ that this is the winning regional team. Specific Instructions on how to select the winning team can be found on page 77. This will allow the winning team and the Coordinator to access a National view online and retrieve all necessary forms.

#### **Forms** (Optional at regional level)

Coordinators decide what forms they will need on a regional level. Included in this manual are some samples that you may adapt for your own use. Electronic MS Word versions of these are on the CD that came with the manual.

The team that will be traveling to the National event will need to submit several forms. If you use forms identical to the sample forms, simply keep a copy of the forms for your winning team, and send the originals to the address provided on the Forms Checklist page. Note: It saves time if your event forms are identical to the national forms.

The following forms are included in this manual as well as on the website:

- Student Medical Form
- Parental Consent Form
- Adult Medical Form
- Team Profiles (Biographies)

These are forms you may want to use at your regional and are also required at Nationals.

National Only Forms: Do not use these for your regional event.

- **Team Commitment Form**
- **Travel Form (HTML)**

#### **FAQ ABOUT ONLINE SYSTEM**

Where do I access the online system?

High School: http://www.scied.science.doe.gov/nsb/coordin.htm

Middle School: <a href="http://www.scied.science.doe.gov/nmsb/coordinators.htm">http://www.scied.science.doe.gov/nmsb/coordinators.htm</a>

What is my username and password?

Look at the label on the inside cover of your manual for your username and password. If you forget your password, there is a password notification with a security question on the log-in page; if you still cannot retrieve your password, contact the DOE Program Manager.

What does "agent done" mean?

You need to close your browser completely, then open it and visit the site again.

I came back and it logged me out?

After 20 minutes, the computer will time you out in order to keep the information more secure. Just return to the login screen and login again. If there are problems, just close your browser and open it again.

How can I make a spreadsheet or database with the information from my regional teams? At the top of the regional team information page, there is a link for "Download Contact Info." You can click this and save the data in an Excel spreadsheet file that can be used to do mail merges, make nametags, send letters, etc.

Can a coach have the same account every year?

No. They need to change their account information slightly because their previous information is still saved in the system. Suggest that they add the year to their username.

How can a student be changed on the registration form?

A coach can edit/save information, but once they click "submit," they need to ask the regional coordinator to change the information.

Instructions: 1. Regional coordinator logs into the coordinator view with username and password. 2. Click on "regional teams." 3. Click on the team's name. 4. Click on the student's name to be replaced/edited. 5. You will see three columns – enter the updated information in column three. 6. Scroll to bottom of page and click "update information." 7. The team's registration form is now updated.

*I'm confused – who can I ask for help?* 

Sue Ellen Walbridge 202-586-7231 <a href="mailto:sue-ellen.walbridge@science.doe.gov">sue-ellen.walbridge@science.doe.gov</a> OR

Cindy (Musick) White 202-586-0987 cynthia.white@science.doe.gov

### INSTRUCTIONS FOR TEAM COACHES HOW TO REGISTER A TEAM ELECTRONICALLY

If you need assistance at any time, contact the regional coordinator for your area with questions. The following are the minimum system requirements to run the online application: Netscape 4.5 or higher or Internet Explorer 5.5 or higher; cookies enabled; JavaScript enabled; and SSL enabled.

- 1. Visit the appropriate web site:
  - a. High School Coaches: http://www.scied.science.doe.gov/nsb/coaches.htm
  - b. Middle School Coaches: http://www.scied.science.doe.gov/nmsb/coaches.htm
- 2. Click on "Regional Events"
- 3. Click on your state.
- 4. Check to see which site covers your area.
- 5. Click on "Account Creation Form" to create a new account. *Note: Coaches from last year will need to create a new account each year.*
- 6. Follow the instructions and submit to log in.
- 7. After logging in, an instruction page will pop up. Click on "Start your registration."
- 8. Type the information into the fields. The information will be on a secure site, so personal information will be protected. If the student is a foreign national, they need to provide their passport number and expiration date. NOTE: The server will time out after 20 minutes so remember to save your information regularly.
- 9. Click "save for future editing" if you need to come back to the registration.
- 10. Click "submit registration" when the information is complete.
  - Note: Once the data is sent, you can make changes only up until the decided registration deadline. The deadline is selected by each coordinator based upon when their regional event will be held.
- 11. After submission, the regional coordinator will confirm your participation and you can make any team changes through them.
- 12. Save your user ID and password for return visits. When you return to the site and log in, you will be given other information. If you forget your password, there is a password notification with a security question on the log-in page; if you still cannot retrieve your password, contact the regional coordinator for your area.
- 13. IMPORTANT: Once you have created an account, you do not need to visit your state page.

  Instead, go to the general coach page to access the system (listed in #1).

All other forms (medical release, parent consent, etc.) are on the Web site in PDF Form Filler.

#### INSTRUCTIONS FOR COORDINATORS HOW TO APPROVE A TEAM FOR REGIONALS

#### APPROVING TEAMS FOR REGIONALS

(All teams must be approved for Regionals in order to be selected as the winning regional team)

- 1. Visit the appropriate Web site:
  - a. High School Coordinator: <a href="https://www.scied.science.doe.gov/nsb/coordin.htm">www.scied.science.doe.gov/nsb/coordin.htm</a>
  - b. Middle School Coordinators: www.scied.science.doe.gov/nmsb/coordinators.htm
- 2. Log in using your user ID and password
- 3. After logging in, you will see a Welcome page. This page shows whether the Site Registration Form was received and has two highlighted links. The two links read: "Regional Team Information All" and "Regional Team Information Approved for Regionals"
- 4. Click on the first link: "Regional Team Information All"
- 5. This page will allow you to do one of two things:
  - a. You can *create a new account* for a Coach. This allows the Coordinator to create a user ID and password for a coach. The Coordinator would want to set up a coach account if the Coach was having trouble setting up the account, or if the regional event did not use the online system. *This is NOT the team registration. This only sets up an account for the Coach.*
  - b. You can approve a team for Regionals.
- 6. So long as a team has begun and saved their team registration, no matter how far into it they are, the team's information will appear on the "Regional Team Information All" page.
- 7. To the far right of the "Regional Team Information All" page, there is a column that says "Approve for Regionals."
- 8. If a team has begun their registration, there will be a box under this column. Click on the box and press "Save Updates."
- 9. Go back to the Welcome page and choose the second link, "Regional Team Information Approved for Regionals."
- 10. The team that you just approved should now be listed on this page.

### INSTRUCTIONS FOR COORDINATORS HOW TO SELECT THE WINNING REGIONAL TEAM

#### SELECTING WINNING REGIONAL TEAM

(Once your regional event is completed and you have a winning team)

- 1. In order to select the winning regional team, the team must have already been approved (See previous page for instructions.).
- 2. Log in to the appropriate Web site using your user ID and password.
- 3. After logging in, select the second link, "Regional Team Information-Approved for Regionals."
- 4. There is a column entitled "Teams" where the name of the schools and team numbers should be listed.
- 5. Click on the winning team name under this column.
- 6. A page should open that lists the name of the students and the coach on that team.
- 7. At the bottom left of the page there is a box that reads, "Select this team as the regional winner." NOTE: If the team has not submitted their Team Registration Form or if the team was not approved for regionals, the system will not allow you to select them as the winning team.
- 8. Click on the box and press Update.
- 9. Go back to the Welcome page.
- 10. A third link entitled, "Coordinator Status Nationals" should now be highlighted.
- 11. The Coach of the winning team will now be able to see a National view when they log in and will be able to access the online travel form as well as all of the other National forms.
- 12. The "Coordinator Status Nationals" page will have all of the Coordinator forms and information.

#### U.S. DEPARTMENT OF ENERGY

**2009 National Science Bowl®** 

#### **Student Confidential Medical Information and Emergency Notification Form**

(Please fill out the entire 3-page form)

This is a PDF Form filler document. Click on the space and type in the information requested. Once the form is complete: (1) click "File," then "Save As" and give it a name and save it on your computer; (2) print the completed form; (3) parent/guardian or student (if 18) must sign it in blue ink (preferred); (4) give this form to the coach; (5) coach to give all completed forms to the regional coordinator. No blank lines allowed; write N/A if needed.

SS	Zip CodeSN(only necessary for National event)  Y, CONTACT:  Secondary
SS  RGENCY Contact	Zip Code SN (only necessary for National event) Y, CONTACT:
SS  RGENCY Contact	Zip Code SN (only necessary for National event) Y, CONTACT:
RGENCY Contact	(only necessary for National event)  Y, CONTACT:
RGENCY Contact	Y, CONTACT:
Contact	,
Name	
Phone	( )
ll Phone	( )
ationship	
within the	e past 12 months)
•	ationship

acement, etc.	
lication Information (Prescribed ow the format listed below.	and Over-the-Counter Medications and Purpos
cribed Current Medications	
Medication/Dosage	•
(Example: Albuterol/10mg po	er day) (Example: Asthma)
r the Counter	
Medication	Purpose/Used For
(Example: Advil/as needed)	(Example: Headaches)
l .	

Visual Limitations Communications Limitations		
		(e.g. No Blood Transfusions)
Regular Physician: YES	NO	_
<u>Physician</u>	Contact	<u>Insurance</u>
	Name	
( )	Phone	( )
	Policy #	
HEALTH INSURANCE		NO
CONSENT TO MI	EDICAL CARE	AND TREATMENT
	_	mergency department can give medical contact parents, but a completed consent
treatment(s) to my child by a licens available to consult with the attended	sed physician, r ding physician(	ration of all medical and/or surgical nurse or hospital in the event I am not (s), attempts to contact me have been m it advisable to proceed with such
(Print Name of Parent or Legal	Guardian)	
(Print Name of Student)  Signature of Parent/Legal Guardian (or	Student if 18) in	Date Blue Ink

NO FAX COPIES

## U.S. DEPARTMENT OF ENERGY 2009 NATIONAL SCIENCE BOWL®

#### PARENTAL CONSENT / MEDIA RELEASE FOR STUDENT PARTICIPATION

School
I, (Mr., Mrs., Ms.), the parent or legal guardian, as appropriate, of, give my consent for him/her (Legal name as appears on photo ID)
to participate in all activities associated with the Department of Energy 2009 Regional and/or National Science Bowl® competitions.
I understand that this will include participation in special events and activities related to the Department of Energy 2009 Regional and/or National Science Bowl® competitions, and will include travel under the supervision of the team coach.
To promote, evaluate, or otherwise describe the Department of Energy's training and educational programs and activities, I give permission to the Department, and its agents, to use in connection with any publication (including but not limited to brochures, booklets, videotapes, reports, press releases, Web sites, and exhibits) any image or recording in which my child, a minor, appears, to use and cite any comment(s), verbal or written, made by said minor about the program, and to use said minor's name in connection with any publication and in such manner as determined by the Department.
I hereby release and discharge the Department of Energy and the United States Government, their officers, agents, servants, and employees, and persons, firms, or corporations contracting with, or acting on behalf of, the Department of Energy or the United States Government with respect to all activities associated with the Department of Energy 2009 Regional and/or National Science Bowl® competitions, as well as their heirs, executors, administrators, successors, or assigns, from any cause of action of any nature whatsoever arising from my child's participation in any and all activities associated with the Department of Energy 2009 Regional and/or National Science Bowl® competitions.
(Print Name of Parent or Legal Guardian)
Date
(Signature of Parent or Legal Guardian in Blue Ink)
Witness: Date
(this form must be witnessed)
NOTE: Team members 18 or older may sign this form.

NO FAX COPIES

### U.S. DEPARTMENT OF ENERGY

2009 National Science Bowl®

### Adult Confidential Medical Information and Emergency Notification Form

(Please fill out the entire 3-page form)

This is a PDF Form filler document. Click on the space and type in the information requested. Once the form is complete: (1) click "File," then "Save As" and give it a name and save it on your computer; (2) print the completed form; (3) must sign it in blue ink (preferred). No blank lines allowed; write N/A if needed.

Birth D	PateSex: M]	F
o ID)		
State	Zip Code	
S	SSN	
	(only necessary for National event,	)
SE OF EMERGENO	CY, CONTACT:	
Contact	Secondary	
Name		
Phone	( )	
Cell Phone	( )	
Relationship	)	
es, specify		
rgeries)		
ory/surgery (within th	e past 12 months)	
	State SE OF EMERGENCE Contact Name Phone Cell Phone Relationship Yes, specify  rgeries)	Name Phone ( ) Cell Phone ( ) Relationship  Yes, specify  rgeries)

ement, etc.	d 12 months e.g. organ transplant, valve
ection Information (Drescaribed and Ox	on the Counter Medications and Durness
w the format listed below.	er-the-Counter Medications and Purpose
ribed Current Medications	
Medication/Dosage	Purpose/Used For
(Example: Albuterol/10mg per day)	(Example: Asthma)
the Counter	
Medication	Purpose/Used For
(Example: Advil/as needed)	(Example: Headaches)

Vegetarian/Kosher Diet Preferences:  Religious or Cultural concerns that may affect care: (e.g. No Blood Transfusions)  Regular Physician: YES NO  Physician	Visual Limitations Communications Limitatio	ons	
Physician    Physician   Contact   Insurance	Vegetarian/Kosher Diet Preferenc	ees:	
Name   Phone     Phone     Phone   P	Regular Physician: YES	NO	_
Phone ( )  Policy #  HEALTH INSURANCE YES NO  CONSENT TO MEDICAL CARE AND TREATMENT  I hereby authorize and consent to the administration of all medical and/or surgical treatment(s) by a licensed physician, nurse or hospital in the event I am not available to consult with the attending physician(s) and the attending physician(s) deem it advisable to proceed with such treatment(s).  (Print Name)  Date	<b>Physician</b>	Contact	<u>Insurance</u>
Policy #  HEALTH INSURANCE  YES NO  CONSENT TO MEDICAL CARE AND TREATMENT  I hereby authorize and consent to the administration of all medical and/or surgical treatment(s) by a licensed physician, nurse or hospital in the event I am not available to consult with the attending physician(s) and the attending physician(s) deem it advisable to proceed with such treatment(s).  (Print Name)  Date		Name	
HEALTH INSURANCE  YES NO  CONSENT TO MEDICAL CARE AND TREATMENT  I hereby authorize and consent to the administration of all medical and/or surgical treatment(s) by a licensed physician, nurse or hospital in the event I am not available to consult with the attending physician(s) and the attending physician(s) deem it advisable to proceed with such treatment(s).  (Print Name)  Date	( )	Phone	( )
CONSENT TO MEDICAL CARE AND TREATMENT  I hereby authorize and consent to the administration of all medical and/or surgical treatment(s) by a licensed physician, nurse or hospital in the event I am not available to consult with the attending physician(s) and the attending physician(s) deem it advisable to proceed with such treatment(s).  (Print Name)  Date		Policy #	
I hereby authorize and consent to the administration of all medical and/or surgical treatment(s) by a licensed physician, nurse or hospital in the event I am not available to consult with the attending physician(s) and the attending physician(s) deem it advisable to proceed with such treatment(s).   (Print Name)  Date	HEALTH INSURANCE	YES	NO
treatment(s) by a licensed physician, nurse or hospital in the event I am not available to consult with the attending physician(s) and the attending physician(s) deem it advisable to proceed with such treatment(s).  (Print Name)  Date	CONSENT TO	MEDICAL CARE	AND TREATMENT
Date	treatment(s) by a licensed physiciconsult with the attending physicic	ian, nurse or hosp	oital in the event I am not available to
	(Print Name)		
Nonville in Kille INV	Signature in Blue Ink		Date

NO FAX COPIES

#### U.S. Department of Energy NATIONAL SCIENCE BOWL

#### PREPARING TEAM BIOGRAPHIES

#### Information to be submitted on-line

Have students write a biographical paragraph, written in third person, which will be included in the National program booklet. In addition, the coach should also prepare a biography.

The following is a list of interesting details that can be included in the biographies.

#### **Students:**

- □ Grade and School attended
- Interests and hobbies
- Activities and clubs
- □ Favorite subjects in school
- □ Future plans for college and career
- □ Interesting facts about yourself
- ☐ The three most important science discoveries to you

#### **Coaches:**

- Subjects and school where taught
- School clubs
- Hobbies and Interests
- □ Length of time as a teacher
- □ Colleges attended and areas of study
- □ Interesting facts about yourself

#### **Example:**

Jane Doe is in the eighth grade. Her interests and hobbies include reading, chess, violin, computers, science, math, knitting, writing, and soccer. She is involved in Varsity Orchestra, MathCounts, UIL, Chess Club, National Junior Honor Society, and Girl Scouts. Her favorite subjects are science, algebra, and Spanish. She plans to attend ABC University and double major in computer science and computer engineering. She would then like to work as a computer programmer. Jane plays the violin, attended the state Math Counts competition, and earned the Girl Scouts Bronze award. John Doe is an eighth grader whose hobbies include reading, playing chess, and solving Rubik's cube. He is involved in MathCounts, UIL, Chess Club, and National Junior Honor Society. His favorite subject is algebra. He plans to attend MIT and obtain a Ph.D. in engineering. Some interesting facts about him are that he can solve a Rubik's cube in under a minute, plays the cello, and likes spinach.

This information will be submitted ON-LINE – the coordinator will have to approve each participant's biography before it can be printed.

#### PRINTING LIST

This list is helpful when estimating costs and planning tasks. Regional Science Bowls may use some or all of the following in preparation and during their event:

- Invitation letters to teams, volunteers, sponsors (and postage)
- Registration materials for teams
- Question binders for moderators to read from
- Scoresheets to use during the competition\* (artwork provided on CD)
- Program book\*
- Scoreboards to display
- Numbers for teams to draw for competition placement
- Team name tents
- Table signs for students "competition tents" (Team A Student One...)\*
- Signs inside and outside rooms and buildings
- Scoresheets for coaches to use\*
- Volunteer schedules, instructions, and thank you letters
- Name badges, lanyards
- Meal tickets
- Materials for enhancement activities
- Certificates, checks, prizes\*
- T-shirts for teams and/or volunteers
- Pens, bags, other give away printed items

Each year, the National event uses a different theme, such as "science to the core," or "zoom into science." Regional events are encouraged to adapt the theme to fit the local flavor or to go with a separate theme. The National artwork will not be provided to the regional events to co-opt.

You are welcome to use the black and white images on the logo sheet provided on the CD and to edit and use the student certificate on the CD.

Please highlight on your materials that this event is part of the U.S. Department of Energy's National Science Bowl. Use the official NSB logo and include the Dept. of Energy in every press release. The public awareness of your event helps the awareness of the national event and to get positive media attention for the students and corporate support for the NSB. You can download the DOE logo from this web page: <a href="http://management.energy.gov/administrative\_services/DOE\_Logo.htm">http://management.energy.gov/administrative\_services/DOE\_Logo.htm</a>

<sup>\*</sup> See attached samples.





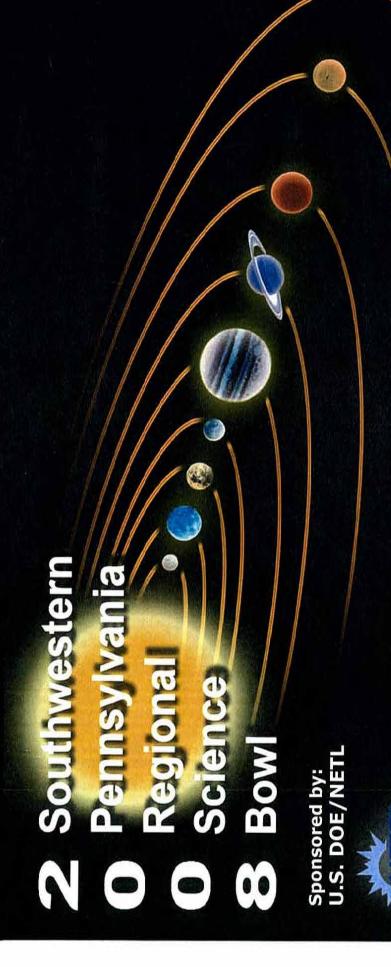
presented to

In recognition of outstanding achievement in mathematics and science, superior student performance, and dedication to educational excellence

Insert Name Here Insert title here

Insert Logo Here

Insert Date Here





Saturday, February 23, 2008 - Community College of Allegheny County - South Campus



Registration - Mezzanine 7:45

Welcoming Remarks - Auditorium 8:50

Lilas Soukup, Science Bowl Coordinator U.S. DOE, National Energy Technology Laboratory, Pittsburgh, PA

Dr. Mary Frances Archey, Interim Senior V.P. and Campus CEO

U.S. DOE, National Energy Technology Laboratory Carl Bauer, Director

The Honorable Tim Murphy

U.S. House of Representatives

Development - U.S. DOE, National Energy Mike Nowak, Office of Research & Technology Laboratory, Pittsburgh, PA

Second Round Fourth Round Third Round First Round 9:50 10:20 10:50 11:20

Fifth Round /First Lunch (Divisions A & C) 12:00 12:40

Sixth Round / Second Lunch (Divisions B & D)

Seventh Round Eighth Round 1:10 1:40

Ninth Round 2:10

Tenth Round 2:40

Lunch periods are noted on your divisional schedule beginning at 12:00 p.m.

# Co-Sponsors

Community College of Allegheny County - South Parsons

ProLogic, Inc.

Science Applications International Corp. Research & Development Solutions, LLC

## Benefactors:

Society for Analytical Chemists of Pittsburgh Spectroscopy Society of Pittsburgh

## Sponsors:

Bombardier Transportation Consol Energy, Inc.

Gold Belt Eagle

Leonardo Technologies, Inc.

Performance Results Corp.

Pittsburgh Super Computing Center Pittsburgh Valve & Fitting

Fechnology & Management Services, Inc.

Alpha Chi Sigma/IUP

## Supporters:

American Federation of Gov't Employees

Laboratory Information Management Systems Institute, Inc.

MEM Federal Credit Union Papa John's Pizza

TJR Enterprises, Inc.

# Other Donations:

**Duquesne Light Company** Carnegie Science Center Dick's Sporting Goods Custom Leisure Wear Heinz History Center Phipps Conservatory Pittsburgh Cafeteria Pittsburgh Steelers Pittsburgh Pirates Snyder's of Berlin Schneider's Dairy Gateway Clipper Pittsburgh Zoo Sam's Club

# Dear Science Bowl Participant:

Campus of the Community College of Allegheny County. I hope you find the I would like to welcome you and your fellow participants to the South experience here today exciting, informative, and challenging.

integral part of the educational community. As such, I would welcome any you enroll here, we stand ready to assist you in your academic endeavors tional Energy Technology Laboratory since the inception of the event. We where you can get a quality education at a most affordable price. Should The community college has co-sponsored the Science Bowl with the Naof you to explore our college and our programs as a four-year institute support the Science Bowl as one way to demonstrate that CCAC is an at the time you transfer to other institutions in Western Pennsylvania.

enhance your knowledge base, computer skills or other academic areas of Even if you have plans to attend another institution, we wish you well and extend the invitation to use our evening or summer school programs to your life to enrich your opportunities for success.

Again, I welcome you and extend my best wishes in your matches today.

Dr. Mary Frances Archey

# Aquinas Academy

Wayne Mikach, Coach Tyler Deschamps, Captain Robert Blume Gerard Rothfus Ryan Flaherty

## Avonworth

Gregory Wolfe
Travis Koehler, Captain
Lucy Angell
Caroline Schaper
Amy Templin

## Baldwin

Susan Kostovny, Coach Theresa Walker, Captain Kelsey Hallinen DonaldHuang David Dgien Patricia Ward

## **Bethel Park** (A)

Barbara Eisel, Coach Andrew Pfeifer, Captain Justin Fleischmann Jean Lee Katie Duerr Jessa Koch

## Bethel Park (B)

Barbara Dietz, Coach Roma Amin, Captain David Kotfis AineshRavi Michael Howley Zachary Smith

## Brashear (A)

Steve Scoville, Coach Steve Meyer, Captain Nicole Arthur Justin Samstag Samantha Bastianini Kris Agharaad

## **Brashear** (B)

Steve Scoville, Coach
Daniel Carroll, Captain
Colby Samstag
Chris Boehm
Jessica McGough
James Dinkel

## Canon-McMillan

Steve Kropinak, Coach Tanner Barnes, Captain Alexander Dragon Gary McMillen Joshua Penderville Sachin Ravi

# Chartiers Valley (A)

Donald Zier, Coach
Keith Werling, Captain
Lauren Parrish
Meetal Bhamre
Aleda Leis
Pradyuma "Bobby" Paladugu

# Chartiers Valley (B)

Kristen Steen, Coach Katie Leis, Captain Sarah Massella Mychal Rutkowski Sri Upadhyay Jeffrey Yeh

## Fox Chapel

Wayne Stanley, Coach Ankur Goyal, Captain Sananthan Sivakanthan Mazdak Bradberry Tudor Achim

## Gateway

Daniel Pompa, Coach Becky Stabile, Captain Audrey Chiao Ekateriria Paramonova Arienne Valerio

# **Great Commission**

Darin Zimmerman, Coach Ryan Plessinger, Captain Jacob McCoy Rebekah Ruhl Amanda Clark Madalyn Plessinger

## Keystone Oaks

Michelle McSwigan, Coach John Dougherty, Captain Lisa Roth Lindsey Templeton Laura Brennfleck Danielle Lorenz

# Laurel Highlands (A)

Greg Turko, Captain John Yonker, Coach Andrew Vensko Nicole Fordyce Josef Saltz

# Laurel Highlands (B)

Natalie Hospodavis, Coach Cassie Wallace, Captain Mike Iannamorelli Ian Brooks **Emily Merti** Josh John

## Moon Area

Ankit Medhekar, Captain Siddarth Govindarajan Judith Shuster, Coach Ling-Ling Lee Vash Patel

## Moon Area

Maddison Paule, Captain Judith Shuster, Coach April Peng Madeline Scanlon **Tyler Pannebaker** Aaron Johnson

## Mt. Lebanon (A)

David Wang, Captain Tom Strong, Coach Max Hutchinson Spencer Fields Kevin Pardo Anna Sims

## Mt. Lebanon (B)

auren Kuntz, Captain Dam Harris, Coach Stephanie Kuo Michael Wehar John McGinty

## North Allegheny

Bill Jorden, Coach John McElhattan Ed Wu, Captain Nimish Telang Clifford Kim Wen Xu

## Norwin

Matthew Anticole, Coach Peter Alfieri, Captain Ashley Sowa **NickCirucci** 

# Peters Township

Walt Jennings, Coach Carl Mitchell, Captain Michael Malencia Danielle Devine Derek Brouwer Allison Kipling

# Pittsburgh Allderdice (A)

Sarah LaRue, Captain John Milcic, Coach Minas Abovyan saac Fisher Anne Geller Zean Chen

# Pittsburgh Allderdice (B)

Angela Lindenfelser, Coach David Clemens-Sewell Brean Molly, Captain Kurt Stahlfeld Blake Barnett Ben Hovne

## Pittsburgh Central Catholic

Anthony Pacella, Captain Bill Chessman, Coach Kevin Didominic **Noah Haibach** Jon Nuttle

## Riverview

Allison Garda, Captain Brian Ludwig, Coach Amanda McClelland Natalie French Rebecca Craig Joseph Killian

## Shady Side Academy (A) Kathy Malone, Coach

Shady Side Academy (B) Ajay Kanak, Captain Heather Fani, Coach Josh Falk, Captain Robert Tisherman Madhav Iyengar Laura Bagamery Jayant Parepally Margaret Fero Varun Reddy

## Niteesh sundaram brinda vijaykumar

David DiPasquale, Coach Katie Cessar, Captain Shaler Area (A) Alexandra Sybo Alissa Tropea Jason O'Neill Ian Terry

## Shaler Area (B)

Jeff Ward, Coach Noah Stachelek, Captain Dominique Didiano Kayla McKaveney Carlo Iasella Jonathon Vannucci

## South Fayette

Joseph Winans, Coach Garrett Vidak, Captain Keelen Collins Prashant Gabani Shruti Valjee Eric Wise

## State College

Julie Gittings, Coach Laura Gabrovsek, Captain Emily Dong Ruilong Ma Lijia Wang Jinhui Zhao

# Upper St. Clair (A)

Marjorie Heins, Coach Emily Berggren, Captain Katherine Haggerty John Subosits Brett Scheller Adam Chrissis

# Upper St. Clair (B)

Marjorie Heins, Coach Kevin Su, Captain Cassandra Miller Liyun Jin Joshua Gao Akhilesh Venkatesan

# Waynesboro Area

Douglas Crist, Coach Adam Janes, Captain Brian Wengert Lucas Franki Caitlyn Hill Logan Hough

## West Mifflin

Brian Aufman, Coach Joseph Didominic, Captain Sarah Beth Medwig Madeline Nassida Jim Vautier

## Yough

Dana Newlin, Coach Michael Gavalek, Captain Matthew Steiner Paul Machesky Troy Markle Ryan Kunkle

**Divisional Sportsmanship Award** - Passes to Carnegie Science Center

**All Schools Participating** - Computer to be used in Math/Science Department

1st Place - \$1000 for School Science Department, School Plaque, Individual Student Plaques, 2 computers for math/science department, participate in SSP Awards Banquet, and a trip to Washington, DC to represent SW Pennsylvania at the National Science Bowl.

2nd Place - \$700 for School Science Department, School Plaque, Individual Student Plaques, 2 computers for math/science department, and tickets to Heinz History Center

3rd Place - \$500 for School Science Department, School Plaque, Individual Student Plaques, 3 computers for math/science department, and a day at the Pittsburgh SuperComputing Center.

4th Place - \$300 for School Science Department, School Plaque, Individual Student Plaques, 3 computers for math/science department, and tickets for Gateway Clipper Cruise.



#### Murphy Keller Christina Danielson **Emily Adkins** Phillip Carma Susan Clemo Karen Cohen Christopher ( Rand Batchel Arthur Black Floyd Boilang Roxanne Bro Donna Carma Adam Coliane Anthony Cug **Brett Aristeg** Sean Carmar Trish Adkins-Irina Aristeg Bruce Brown Mike Ciocco Bob Coliane Mary Cugini Carol Bailey **Brian Albin** Julie Cugini Dave Anna Debra Ball

Cindy Pellegrino	Debra Smerkel	Lilas Soukup	John Uziel	Dave Wildman	Louise Vos	Aaron Whitfield	Dave Wildman	Fran Wright	)
	Fred Goellner	Marisa Golden	John Hindman	h Karen Lockhart	Donna Shaffer Lo	Pat Sienko Az	Jerry Simkonis Da	April Sites Fr	(0
	Brian Albin	Dave Anna	Lynn Billanti	Sharon Froelich	Richard Killmeyer	Barbara Kutchko	Karen Lockhart	Jan Malle	Sharon Marchant

Mike Nowak

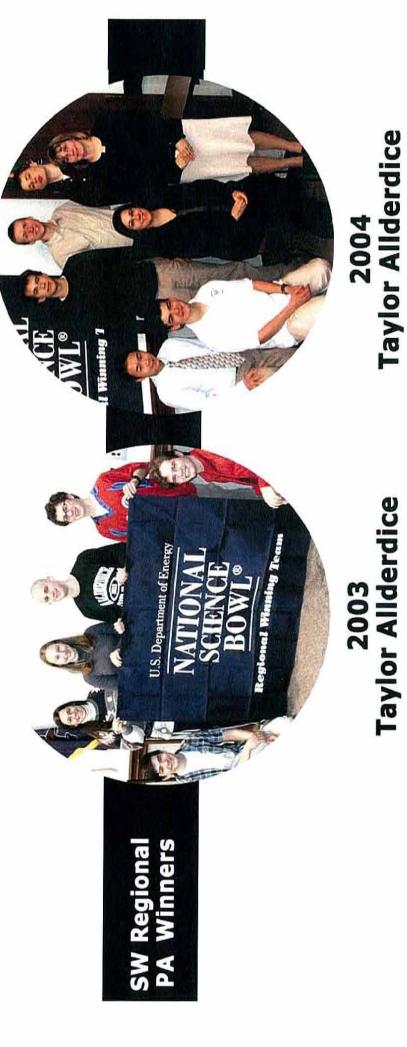
Richard Killmeyer	Donna Shaffer	Louise Vos
Barbara Kutchko	Pat Sienko	Aaron Whitfield
Karen Lockhart	Jerry Simkonis	Dave Wildman
Jan Malle	April Sites	Fran Wright
Sharon Marchant	Sarah Sites	n
John McDowell	Debra Smerkol	Special thanks also to
Linda Miller	Kelsey Smerkol	all of the volunteers
Bob Mohn	Michele Soukup	from CCAC - South
Kathy Nedzesky	Lilas Soukup	and Indiana
Mike Nowak	Lisa Steiner	University of PA.
Nan Nowak	Brian Strazisar	
Lorraine Parham	Larry Sullivan	
Cindy Pellegrino	Amanda Thompson	
Henry Pennline	Robert Thompson	
Jane Robbins	John Uziel	

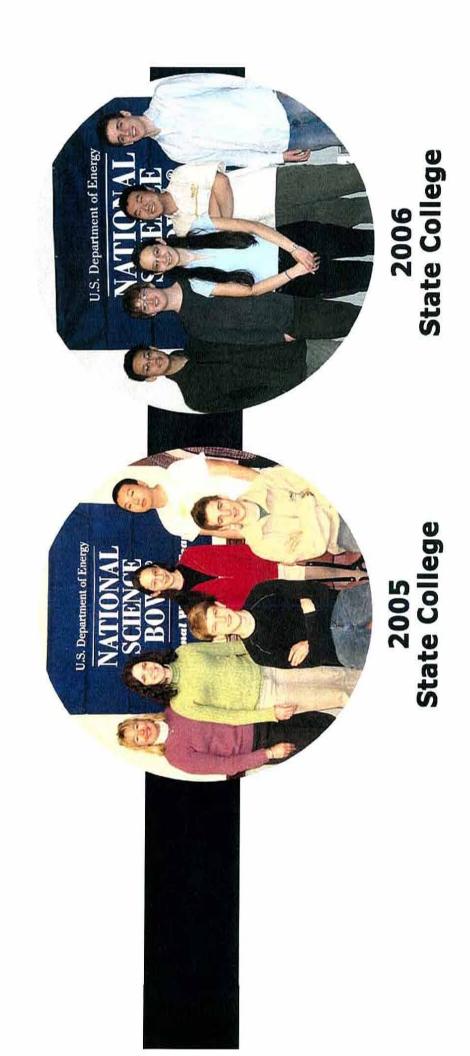
cial thanks also to

The final results for the 2007 Southwestern Pennsylvania Science Bowl were:

1st Place – State College 2nd Place – Bethel Park 3rd Place – Chartiers Valley 4th Place – South Fayette **State College** went on to finish 2nd in the 2007 DOE Science Bowl. Congratulations!







# National Science Bowl

The National Science Bowl® is a highly visible educational event and academic competition among teams of high school students who attend science seminars and compete in a verbal forum to solve technical problems and answer questions in all branches of science and math. The regional and national events encourage student involvement in math and science activities, improve awareness of career options in science and technology, and provide an avenue of enrichment and reward for academic science achievement. Since the program began in 1991, it has brought together more than 130,000 high school math and science students from across the country. These young men and women are helping to open doors to careers in cutting-edge science, mathematics, and engineering. The U.S. Department of Energy (DOE) is proud to be the sponsor of the National Science Bowl.

Competing teams from public, private, home schools or clubs are quizzed on scientific tops in biology, chemistry, physics, astronomy, earth science and mathematics. Each team is composed of four members, one alternate and a teacher who serves as an advisor and coach. Sixty-seven high school teams from 41 states, the District of Columbia, U.S. Virgin Islands and Puerto Rico held regional competitions and participated in the 2007 National Science Bowl in

Washington, DC. In 2007, awards to the top winning teams included: two weeks in Sydney, Australia, to participate in a physics workshop; a week in France to visit a nuclear energy site and environmental plants; and science research trip to a DOE site.

All 16 teams making it to the final double elimination rounds received \$1,000 for their school. IBM provided Work Pads to the coaches of the top five teams and the team (voted by the volunteers) that exhibited the best sportsmanship. New to the National Science Bowl in 2003, 16 schools participated in the model hydrogen fuel cell car competition. The competition consisted of two races - a speed race and king-of-the-hill climb.

# Southwestern Pennsylvania Science Bowl

The DOE's National Energy Technology Laboratory (NETL) conducts the regional competition for high school teams in February each year. Approximately 380 students, teachers, and volunteers take part. The semifinal round-robin tournament takes place on a Saturday at CCAC with the top team from each of four divisions competing in the final double elimination matches at NETL the following Wednesday.

The winning regional team receives an expense-paid trip to the National Science Bowl in the Nation's capital to be held May 1-6, 2008. All four schools in the finals receive a cash prize and computers for their science and math programs and all 20 students receive plaques and other prizes for their achievements.



# **Electronic Device Guidelines**

The use of electronic devices (i.e. cell phones, pagers, MP3 players, DVD players, etc.) is not permitted during any of the public sessions of the Science Bowl by any participant (i.e., student, coach, official). Public sessions include: general meetings in the auditorium or any other conference room and competition rooms.

If a Science Bowl official observes the use of these devices during the prohibited usage periods, the device will be removed from the individual and will be returned at the conclusion of the event.

All participants are to provide their attention to the presenters during the general public session and not disturb the competitions.

# **Recycle Name Badges**

All participants are to return their plastic name badge holders to Command Central with their completed surveys.

Thank You!

U.S. Department of Energy

National Science Bowl®

U.S. Department of Energy

National Science Bowl®

National Science Bowl®

#### PREPARING FOR NATIONALS

Once the regional coordinator has selected the winning team on-line, the process starts for planning their trip to the National event (see instructions below). Students and coaches will have many questions, so please refer them to the National Science Bowl® web site for the latest information on schedules, locations, what to bring, etc. It is the responsibility of the Regional Coordinator to ensure all of the forms are completed and submitted/mailed. The ideal situation is for the regional coordinator to gather, sort, and review all forms before sending them in one complete package. Forms are to be legible and every field completed.

Once the Coordinator has selected their winning team, the team gets access to a new National Web page where all of the National forms are located. The coach needs to then follow the instructions below.

Coaches should login to: <a href="http://www.scied.science.doe.gov/nsb/coaches.htm">http://www.scied.science.doe.gov/nsb/coaches.htm</a> (middle school) to get to the team status page.

- 1. Coaches MUST complete and submit the **Online Travel Form** (one form per team).
- 2. If the team has not previously completed **parental consent and medical forms** (from the 2009 regional event), please complete and mail. The following forms are at: <a href="http://www.scied.science.doe.gov/nsb/pdf/Adult%20Medical%20Form.pdf">http://www.scied.science.doe.gov/nsb/pdf/Adult%20Medical%20Form.pdf</a> (one per coach) <a href="http://www.scied.science.doe.gov/nsb/pdf/Parental Consent.pdf">http://www.scied.science.doe.gov/nsb/pdf/Parental Consent.pdf</a> (one per student) <a href="http://www.scied.science.doe.gov/nsb/pdf/Student%20Medical.pdf">http://www.scied.science.doe.gov/nsb/pdf/Student%20Medical.pdf</a> (one per student)
- 3. Complete the following National forms:

**Team Commitment Form** (requires original signatures in blue ink only) <a href="http://www.scied.science.doe.gov/nsb/pdf/Team\_Commitment.pdf">http://www.scied.science.doe.gov/nsb/pdf/Team\_Commitment.pdf</a>

- Student/parent to complete using pdf form filler on Web site, then print and have student and parent sign hard copy
- Coach sign and mail
- Must be received before tickets will be purchased

**Team Profiles** (see instructions on Web)

• Coach submits online and coordinator approves.

#### **Team Photo**

• Coordinator uploads to web with caption identifying people in the photo.

Check your status page to view which forms have been received. The check box next to each team member's name will be marked when a complete form is received. If you have technical questions, please contact the National Coordinator.

ORISE will work with the team to make travel arrangements. Problems with team travel arrangements will be directed to the regional coordinator, and if still needed, will be then addressed by the National Science Bowl coordinator.

# SCIENCE BOWL FORMS CHECKLIST

To Suc	ue Ellen Walbridge (high school) or Cindy White	e (middle scho	ol) – Imi	<u>mediately</u>	<u>y</u>	
[]	Press selection of winning team button immediately for	ollowing your r	egional co	mpetition	•	
[]	Send email or letter to headquarters explainin (Only if regional rules were different)	g how region	al rules	differed	from	Nationals
FORM	MS – Due ASAP (no later than March 11, 2009)					
[]	Online Travel Form (1 form per team) – Electronic H		online to	coaches a	fter reg	gionals)
[]	Original Student Medical Release Forms – PDF Form	ı Filler – Blue Iı	nk Only fo	r Signatur	res	
[]	Original Parental Consent/Media Release Forms – PD	OF Form Filler -	Blue Ink	Only for S	Signatu	ires
[]	Original Coach Adult Medical Release Form – PDF F	Form Filler – Bl	ue Ink On	ly for Sign	natures	
[]	ORISE Adult Media Release Form (1 form per adregionals)	dult) – Electro	nic HTMI	C (online	to coa	iches after
[]	Team Commitment Forms (1 for each student) – PI next page) (available online to coaches after regionals		– Blue In	k Only fo	r Signa	atures (see
[]	Team Profiles (complete and submit from National Se	cience Bowl® V	/eb site) –	Electroni	с НТМ	IL
Ms. No Oak Ric P.O. Bo Oak Ric FedEx	Norma Ward Ridge Institute for Science & Education (ORISE) Box 117, MS-36 Ridge, TN 37831-0117 x to 1299 Bethel Valley Road, Building SC-200, New	I middle school Jan Tyler mas Jefferson N Department of Hofstadter Road port News, VA ) 269-7164	ational Ac Energy l, Suite 6		Facilit	y
Forms while to	MS FOR COORDINATOR s can be found on NSB online system. It is a good idea traveling, the coach may want to carry a copy of the ry and there are updates to be made because of recent in	forms with their	n. If a st	udent con	npleted	a form in
[]	Committee & Sponsor Form (to complete on Web site	e) – Electronic I	HTML			
[]	Coordinator Attend Nationals Form (Please complete	even if NOT at	tending.)			
[]	4-H Registration Form, if attending Nationals					
[]	Coordinator Adult Medical Form					
[]	Team Photo and Caption – Upload Online					
[]	Team Profiles (approve Coach submission) – Electron	nic HTML				

# ORISE ADULT MEDIA RELEASE FORM

(for information purposes only)

# RELEASE FORM - ADULTS

NATIONAL SCIENCE BOWL®
School Name:
Oak Ridge Associated Universities (ORAU) is a consortium of doctoral-granting colleges and universities. ORAU serves the government,
academia, and the private sector in important areas of science and technology. A private, not-for-profit corporation, ORAU manages the Oak
Ridge Institute for Science and Education (ORISE) for the U.S. Department of Energy. ORISE undertakes national and international programs in
education, training, health, and the environment, and participates in activities such as the National Science Bowl®.
In carrying out these programs, participants are often photographed, filmed, videotaped or otherwise recorded to illustrate the kind of activities
being administered at ORISE. You,, may be photographed, filmed, videotaped, or otherwise recorded during
participation at the National Science Bowl® and we desire your permission to use any images or recording taken at this time to promote our
training and educational programs and other activities. Any such image or recording may be included in such promotional materials as
brochures, booklets, videotapes, reports, press releases, websites, and exhibits. If you agree to the use of any such image or recording, please
execute the RELEASE FORM below and return it to:
Oak Ridge Institute for Science and Education
Science Education Programs
P.O. Box 117, MS 36
Oak Ridge, TN 37831-0117
Attention: Tom Richmond
RELEASE FORM - ADULTS
To promote, evaluate, or otherwise describe ORISE training and educational programs and activities, I give permission to ORISE, and its agents,
to use in connection with any publication (including but not limited to brochures, booklets, videotapes, reports, press releases, websites, and
exhibits) any image or recording in which I, appear, to use and cite any comment(s), verbal or written, made
by me about any ORISE program, and to use my name in connection with any publication and in such manner as determined by ORISE.
Signed:
Date:
Witness:
(this form must be witnessed)  OAK RIDGE ASSOCIATED UNIVERSITIES
Date:

#### **ALUMNI**

There is a great resource in tapping Science Bowl alumni to assist with your competition – both alumni of your specific regional event, and alumni of other events who have relocated to your area because of colleges or careers.

It is helpful to save data on past student participants, and to keep in contact with college graduates to maintain this alumni resource.

#### Possibilities for alumni:

- Act as regional volunteers
- Serve on Science Bowl committee
- Attract media coverage if alumni are in community leadership or celebrity positions
- Coach a regional team
- Give a speech or demonstration of science research
- Mentor students
- Provide information about colleges, internships, careers
- Write sample questions
- Many more

Note: The National Science Bowl® event invites alumni to Washington, D.C. to act as competition officials and to present seminars, so please encourage your alumni to register on the NSB Web site: <a href="http://www.scied.science.doe.gov/nsb/alumni.htm">http://www.scied.science.doe.gov/nsb/alumni.htm</a>



Alumni at the 2008 NSB for High School Students

# **U.S. Department of Energy** National Science Bowl®

Thursday, April 30 - Tuesday, May 5, 2009 Washington, D.C.

## **DRAFT Schedule of Events**

## Thursday, April 30, 2009 Welcome, Token Exchange, Night Tour of the Monuments

Location:	National 4-H Conference Center
	7100 Connecticut Avenue
	Chevy Chase, MD 20815
	(301) 961-2801

Dress:	Casual Attire
--------	---------------

7:00 - 7:20 p.m.	Welcome Assembly for High School – <i>Aiton Auditorium</i>
------------------	--

7:30 – 7:45 p.m.	Buses depart for Night Tour of Monuments – High School	l Only
------------------	--	--------

Bus Route: Drop teams at FDR Memorial walk along Tidal Basin path Pick up at Jefferson Memorial; Drop at Lincoln Memorial & Pick up at

WWII Memorial & Einstein Statue

7:30 – 8:00 p.m. Welcome Assembly for Middle School – *Aiton Auditorium* 

8:00 p.m. Middle School Token Exchange and Refreshments – *Clover Cafe* 

10:00 p.m. Curfew for Middle School – must be in sleeping rooms

10:30 p.m. Lights out for Middle School

Board Games are available to be picked up at NSB Info Desk in J.C.

Penney Lobby

10:00 – 10:30 p.m. Buses return to National 4-H Conference Center

10:00 – 11:00 p.m. | Refreshments for High School – *Recreation Center* 

11:00 p.m. All participants must be inside the 4-H buildings – Chevy Chase Noise Ordinance

Return Board Games to NSB Info Desk

11:00 p.m. Curfew – all participants must be in their rooms (students, coaches & coordinators) – Campus policy

## Friday, May 1, 2009

## Museums, Scavenger Hunt, Rules Review for Middle School, AP Review

Dress:	Casual Attire - National Science Bowl T-Shirt
6:30 – 7:15 a.m. 7:30 – 8:30 a.m.	Breakfast – Clover Cafe  Middle School Teams  High School Teams
7:45 – 8:30 a.m.	Regional Science Bowl Coordinator's Meeting – Clover
8:45 – 9:15 a.m.	Assembly for High School – <i>Aiton Auditorium</i> Assembly for Middle School – <i>Ohio</i>
9:15 a.m.	Teams board buses & depart for Air & Space Museum Pick up bottled water; poncho (if raining), sunscreen (if sunny)
10:00 a.m.	Buses drop at 4 <sup>th</sup> & Independence Ave., SW (by Air & Space)
3:30 p.m.	Middle School Teams Meet & load buses at 4 <sup>th</sup> Street & Jefferson Drive, S.W. (Near Air & Space Museum)
4:00 p.m.	High School Teams Meet & load buses at 4 <sup>th</sup> Street & Jefferson Drive, S.W. (Near Air & Space Museum)
4:15 – 4:45	Buses return to National 4-H Conference Center
4:30 – 5:30 p.m. 5:30 – 6:30 p.m.	Dinner – Clover Cafe (Bar-B-Q)  Middle School Teams  High School Teams
6:30 – 8:15 p.m.	Assembly & Rules Review for Middle School – <i>Ohio</i>

7:00 – 7:30 p.m. | Assembly for High School – *Aiton Auditorium* 

7:30 – 9:30 p.m. Advanced Placement Test Review Sessions for High School (see room

schedule in J.C. Penney Lobby)

8:30 – 10:30 p.m. Refreshments for Science Bowl Coordinators – *New York Lounge* 

8:30 p.m. Return Sports Equipment to 4-H Front Desk

8:30 – 10:30 p.m. | Refreshments – *Recreation Center* 

Board Games are available to be picked up at NSB Info Desk in J.C.

Penney Lobby

10:00 p.m. Curfew for Middle School – must be in sleeping rooms

10:30 p.m. Lights out for Middle School

11:30 p.m. Return Board Games to NSB Info Desk

12:00 Midnight Curfew – all participants must be in their rooms (students, coaches &

coordinators) – Campus policy

#### Saturday, May 2, 2009

#### Science Day, Middle School Academic Competition

**Dress:** High School Teams: Casual Attire

Middle School Teams: Regional T-Shirts

Alumni: White NSB Polo

Coordinators: Maroon Polo Shirts

Breakfast – Clover Cafe

6:30 – 7:15 a.m. Middle School Teams 7:30 – 8:30 a.m. High School Teams

7:00 – 8:00 a.m. Volunteers Arrive for Middle School Academic Competition

7:30 a.m. Question Review for Middle School Volunteer Moderators & Scientific

Judges - Clover

8:00 – Noon | Science Bowl Alumni Review Session – John Deere

8:00 – 8:45 a.m.	Volunteer Meetings for Middle School Academic Competition
8:45 – 9:00 a.m.	Assembly for all High School participants – Aiton Auditorium
	Photo of Middle School Teams – Front of JC Penney Hall
9:00 – 10:15 a.m.	Saturday Science Bowl Seminars I – Plenary Session – <i>Aiton Auditorium</i> Speaker:
9:30 a.m.	Middle School Academic Tournament Round Robin 1
10:00 a.m.	Round Robin 2
10:30 – 11:45 a.m.	Break for Middle School Teams (cereal bars & water in rooms)
10:30 – 11:45 a.m.	Saturday Science Bowl Seminars II
10:45 a.m.	Round Robin 3
11:15 a.m.	Round Robin 4
11:45 a.m.	Round Robin 5
12:00 – 1:15 p.m.	Lunch for High School Teams – Clover Cafe
12:15 p.m.	Round Robin 6
12:45 – 1:30 p.m.	Lunch for Middle School Teams – Clover Cafe
1:15 – 2:30 p.m.	Saturday Science Bowl Seminars III
1:45 p.m.	Round Robin 7
2:15 p.m.	Round Robin 8
2:30 – 2:45 p.m.	Break for High School – Recreation Room
2:45 p.m.	Round Robin 9
2:45 – 3:45 p.m.	Division Team Challenge Competition – Arrhenius, Bromery, Einstein, Galileo Divisions
3:00 p.m.	Break Middle School Teams (Refreshments ) and Round Robin Tie Breaks, if necessary

	Middle School Double Elimination
3:30 p.m.	Double Elimination Round 1
4:00 p.m.	Double Elimination Round 2
4:00 – 5:00 p.m.	Division Team Challenge – Curie, Darwin, Fermi, Hypatia Divisions
4:30 p.m.	Double Elimination Round 3
5:00 p.m.	Double Elimination Round 4
4:30 – 5:30 p.m. 5:30 - 6:30 p.m.	Dinner – Clover Café High School Teams Middle School Teams
6:30 p.m.	Double Elimination Round 5
6:30 – 6:45 p.m.	High School Teams Assemble in Aiton Auditorium
6:45 – 8:30 p.m.	High School Announcements & Rules Review – Aiton Auditorium
8:00 – 10:00 p.m.	Activity & Refreshments for Middle School Teams - Ohio
8:30 – 10:30 p.m.	Competition Practice (optional) – see list of rooms to use at NSB Info Desk in J.C. Penney Lobby – High School Only
8:30 – 11:00 p.m.	Refreshments for High School Teams – Recreation Room
	Board Games are available to be picked up at NSB Info Desk in J.C. Penney Lobby
9:00 – 11:00 p.m.	Coaches & Alumni Social – Minnesota
10:00 p.m.	Curfew for Middle School – must be in sleeping rooms
10:30 p.m.	Lights out for Middle School
11:30 p.m.	Return Board Games to NSB Info Desk
12:00 Midnight	Curfew – all participants must be in their room

# **Sunday, May 3, 2009**

# Middle School Hydrogen Fuel Cell Event, High School Academic Event Let the Games Begin!!

Dress:	Casual Attire – High School Teams: Regional Science Bowl T-Shirt  Middle School: Fuel Cell T-Shirts  Regional Coordinators: Navy Blue Polos
	Breakfast – <i>Clover Cafe</i>
6:30 – 7:15 a.m. 7:30 – 8:30 a.m.	Middle School Teams High School Teams
7:00 – 9:00 a.m.	Volunteer Officials begin arriving for High School Academic Competition
7:45 a.m.	Question Review for Volunteer Moderators & Scientific Judges – Clover
8:00 – 9:30 a.m.	Free Time for Teams on Campus
7:00 – 9:00 a.m.	Officials begin arriving
8:30 a.m.	Staff departs for Bethesda Chevy Chase HS for Fuel Cell Event
8:30 – 9:00 a.m.	HS Academic Competition Volunteer Officials Arrive
9:00 – 9:30 a.m.	Interfaith Worship Service – Ohio
9:30 a.m.	Middle School Teams Board Buses at Flag Pole
	Fuel Cell Event Volunteer Officials Arrive at Bethesda Chevy Chase High School
10:00 – 5:30 p.m.	Middle School Hydrogen Fuel Cell Event – Bethesda Chevy Chase High School
9:45 a.m.	Photograph of all High School participants – <i>front of J.C. Penney Hall</i> Photograph of Western Area Power Administration Teams Photograph of Society of Hispanic Professional Engineers Teams Photograph of NOBCChE Teams
9:45 – 11:00 a.m.	Brunch for High School Teams – Clover Café
	Brunch for Volunteers – North Carolina Lobby (take food to Rec Room)
10:45 a.m.	Team Captains pick up name tents from Sue Ellen – Clover Cafe

### **High School Round Robin Matches**

11:15 – Noon Round One

Noon Round Two

Noon – 1:00 p.m. Lunch for Middle School Teams at BCC High School

12:30 p.m. Round Three

1:00 p.m. Round Four

1:00 – 2:00 p.m. Fuel Cell Event – Time Trial 1 – Main Gym

1:00 – 3:00 p.m. Fuel Cell Event Design Document Interviews – Auxiliary Gym

1:30 p.m. Round Five

2:00 p.m. Round Six

2:00 – 3:00 p.m. Fuel Cell Event – Time Trial 2 – Main Gym

2:30 p.m. Break – *Recreation Room* 

3:00 p.m. Round Seven

3:00 – 3:30 p.m. Fuel Cell Event – Snack & Clean up Tables – Atrium

3:30 p.m. Round Eight

3:30 – 5:00 p.m. Fuel Cell Event – Double Elimination Heats – Main Gym

4:00 p.m. Round Nine

4:30 p.m. Round Ten

5:00 -5:30 p.m. Fuel Cell Event – Teams Board Buses for Return to 4-H

5:15 p.m. Announcements in Recreation Center

5:00 – 6:00 p.m. Dinner – Clover Cafe
High School Teams
Middle School Teams

6:30 p.m. High School Team Captains Receive Double Elimination Team Tents – JC

Penney Lobby

Board Games are available to be picked up at NSB Info Desk in J.C.

Penney Lobby

**Double Elimination Matches** 

7:00 p.m. High School Double Elimination Round One

7:00 p.m. Middle School Teams Assembly – *Aiton Auditorium* 

7:30 p.m. High School Double Elimination Round Two Middle School Double Elimination Round 6

8:00 p.m. High School Double Elimination Round Three 8:00 p.m. Middle School Double Elimination Round 7

8:30 p.m. High School Double Elimination Round Four (visual bonus questions)

Return all 4-H sports equipment to Front Desk

8:30 – 10:00 p.m. Middle School Teams may check out at Registration Desk – need to pay

excess charges. Drop key on Monday morning

8:30 – 10:00 p.m. | Refreshments for All Teams – *Clover Cafe* – Make your own sundae

9:00 p.m. High School Double Elimination Round Five

10:00 p.m. Curfew for Middle School – must be in sleeping rooms

10:30 p.m. Lights out for Middle School

11:00 p.m. Return Board Games to NSB Info Desk

All participants must be inside the 4-H buildings – Chevy Chase Noise

Ordinance

11:00 p.m. Curfew – all participants must be in their rooms (students, coaches,

coordinators) – Campus policy

Reminder: If your team is NOT competing on Monday, please be good

SILENT neighbors.

#### Monday, May 4, 2009

#### The Thrill of Victory & Capitol Hill Reception

Middle School Teams: NSB Green Polo Shirts, dress slacks/skirt, dress

shoes

Regional Coordinators & NSB Staff: Business Attire

Breakfast – *Clover Cafe* 

6:30 – 7:15 a.m. Middle School Teams 7:15 – 8:00 a.m. High School Teams

7:30 a.m. Middle School Teams Check Out of Rooms – Take luggage to bus loading

area

**Double Elimination Matches at National 4-H Conference Center** 

7:30 a.m. High School Double Elimination Round Six (Clover, America)

8:00 a.m. High School Double Elimination Round Seven (Clover)

8:00 a.m. Middle School Teams Board Buses w/luggage & Depart for National

**Building Museum** 

8:30 – 9:00 a.m. High School Teams Board Buses & Depart for National Building Museum

**National Building Museum** 

401 F Street, NW, Washington, DC 20001

9:15—9:45 a.m. All participants and guests assemble in audience chairs

Introduction of special guests

10:00 a.m. Middle School Round Eight – Final Match

10:30 a.m. Middle School Round Nine – if necessary Match

11:10 a.m. High School Round Eight

11:50 p.m. High School Round Nine – if necessary Match

12:30 p.m. Competition Ends

Keynote Address:

Presentation of Awards 1:15 – 1:45 p.m. Middle School Top 8 Middle School Fuel Cell • High School Top 12 • Middle School Civility • High School Civility Middle School Top 4 High School Top 4 1:45 - 2:45 p.m. Luncheon 3:00 p.m. Middle School Teams board buses & depart for Airports 3:15 p.m. High School Teams board buses & depart for Capitol Hill Capitol Hill Cannon House Office Building, Independence and 1<sup>st</sup> Street, SW, Washington, DC 5:00 - 7:00 p.m. High School Teams Congressional Reception – Cannon Caucus Room 7:00 p.m. High School Teams board buses & depart for National 4-H Conference Center 7:45 p.m. Teams arrive at National 4-H Conference Center 8:00 - 10:00 p.m. Pizza, Salad Bar & Ice Cream Social – Clover Café 8:00 p.m. Board Games are available to be picked up at NSB Info Desk in J.C. Penney Lobby Teams may check out with the registration desk by paying for any phone calls made from their rooms, etc. On Tuesday, you will just need to drop your key at the front desk & put your luggage in either Missouri or Kathleen's Corner (please match luggage tag's bus number with the sign posted on the wall in these rooms). 11:00 p.m. All participants must be inside the 4-H buildings – Chevy Chase Noise Ordinance 11:00 p.m. Return Board Games to NSB Info Desk 11:00 p.m.

Curfew – all participants must be in their rooms (students, coaches,

coordinators) – Campus policy

# Tuesday, May 6, 2009

# **Goodbye Until Next Year**

6:30 – 8:00 a.m.	Breakfast – <i>Clover Café</i>
8:30 –9:00 a.m.	Teams Board Buses and depart for airports

Dress:

Casual Attire – traveling clothes

#### WHO TO CONTACT

National Science Bowl Web Site: <a href="http://nationalsciencebowl.energy.gov">http://nationalsciencebowl.energy.gov</a>

#### **High School Coordinator**

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#### **Middle School Coordinator**

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