

# DOE's National Science Bowl<sup>®</sup> Fact Sheet

## About DOE's National Science Bowl<sup>®</sup>

To ensure that today's brightest students become tomorrow's scientific leaders, President Bush proposed the American Competitiveness Initiative, which aims to keep America as the most innovative nation in the world. With funding from Congress, this initiative will provide increased investments in the most critical basic research programs in the physical sciences to strengthen science and math education, and encourage entrepreneurship and technology discovery. The U.S. Department of Energy's (DOE) National Science Bowl exemplifies how children who are engaged, encouraged, and equipped with proper resources can succeed academically. The goal of the American Competitiveness Initiative - and the National Science Bowl – is to invest in our next generation of scientists, engineers and educators so America can remain at the forefront of innovation and successfully compete in the 21<sup>st</sup> century global marketplace.

DOE's National Science Bowl attracts more than 17,000 students nationwide. At the high school level, it involves more than 12,000 students and at the middle school level, more than 5,000 competitors. The mission of the National Science Bowl is to encourage students to excel in science and math, and to pursue careers in those fields. It is the only science competition in the United States sponsored by a federal agency. For more information about the National Science Bowl, visit: <u>http://nationalsciencebowl.energy.gov</u>.

#### How the National Science Bowl Works

The National Science Bowl is a nationwide academic competition that tests students' knowledge in all areas of science. Competing teams from diverse backgrounds are comprised of four students, one alternate, and a teacher who serves as an advisor and coach.

Students are quizzed in a fast-paced question-and-answer format similar to *Jeopardy*. High school students are quizzed on biology, chemistry, physics, astronomy, earth science, general science, and math. Middle school students are quizzed on a variety of disciplines including earth, physical, life and general science and math.

Regional winners receive an all expense paid trip to the National Science Bowl Finals. More than 5,000 volunteers from the private sector, academia, non-profit groups and DOE help manage and implement these events. National corporate sponsors include General Motors, AREVA, Inc., Bechtel Corporation, IBM, and Texas Instruments.

#### The Hydrogen Fuel Cell Model Car Challenge

A featured event at the National Middle School Science Bowl, The Hydrogen Fuel Cell Model Car Challenge invites students to design, build, and race model cars, competing for cash prizes for their school's science department. Students build their hydrogen cars from everyday household materials, with creative touches such as using compact discs as wheels. The cars are raced on ground level tracks and tested to see how steep an

incline they can climb. This competition tests the creative engineering skills of many of the brightest math and science students in the nation as they gain hands-on experience in the automotive design process and with hydrogen fuel cell technology.

## Quick Facts on the National Science Bowl for High School Students

- The National Science Bowl for high school students is in its 18<sup>th</sup> year.
- More than 12,000 high school students from 1,800 schools in 41 states, Puerto Rico, U.S. Virgin Islands, and the District of Columbia will compete this year, making the National Science Bowl the nation's largest science competition.
- Since 1991, more than 130,000 high school students and their teachers have participated.
- Sixty-seven regional competitions are held around the country from January through March.
- The National Science Bowl Finals for high school students will be held in Washington, DC, from May 1 6, 2008.
- The national championship team will win a science-related trip to its choice of the International Youth Science Forum in England, nuclear science energy trip to France, or DOE's Thomas Jefferson National Accelerator Facility in Virginia. The second and third place teams will choose from the remaining trips.
- Regional sponsors range from small businesses to Fortune 500 companies.

## Quick Facts on the National Science Bowl for Middle School Students

- The National Science Bowl for middle school students is in its seventh year.
- More than 5,000 sixth, seventh and eighth graders from 30 states will compete in the National Science Bowl's regional competitions for middle school students.
- Thirty-nine regional competitions are held around the country from January through May.
- The National Science Bowl Finals for middle school students will be held in Golden, CO, from June 19 22, 2008
- The national championship team will receive sponsors' gifts and a cash prize for their school.

## About DOE's Office of Science

DOE's Office of Science manages the National Science Bowl<sup>®</sup>, is the single largest supporter of basic research in the physical sciences in the nation, and helps ensure U.S. world leadership across a broad range of scientific disciplines. The Office of Science supports a diverse portfolio of research at more than 300 colleges and universities nationwide, manages 10 world-class national laboratories with unmatched capabilities for solving complex interdisciplinary scientific problems, and builds and operates the world's finest suite of scientific facilities and instruments used annually by more than 19,000 researchers to extend the frontiers of all areas of science. For more information on DOE's Office of Science, visit: <u>www.science.doe.gov</u>.