Q&A

What is the Kids' Science Challenge?

The *Kids' Science Challenge* (KSC), created by Jim Metzner, is a nationwide science competition for students in grades 3 to 6. The competition is currently in its 3rd year. The KSC is funded primarily by the National Science Foundation and receives additional support from the American Honda Foundation. *The Kids' Science Challenge* is about inspiration and fun, using new media and hands-on activities to excite and engage kids in science.

Who is Jim Metzner and why did he create the Kids Science Challenge?

Jim Metzner has been producing sound-rich radio programs for the past 30 years, beginning his career with the ground-breaking short format series - You're Hearing Boston, produced for CBS station WEEI-FM. Metzner's other series include You're Hearing San Francisco, You're Hearing America, The Sounds of Science, and Pulse of the Planet, now it in its twenty-second year and on the cusp of its 5000th broadcast. He's produced dozens of features for All Things Considered, Marketplace, Weekend Edition and other public radio programs, and has won numerous awards for his work.

Jim has received major grants from the National Science Foundation, NASA and the National Endowment for the Humanities. In 2006, he was awarded a fellowship at the Marine Biological Laboratory in Woods Hole. His work has been featured in Wired Magazine, the New York Times, Audio Magazine, National Geographic, the Wall Street Journal and on the Today Show and the CBS Evening News.

The *Kids' Science Challenge* was created to help elementary school kids have an appreciation for the worlds of science and engineering. Today, many kids think science is for geeks and has no real importance in their life. Our future depends on how well our kids are prepared to meet the challenges of a changing world. It's a world where we need to understand our environment and how to manage it sustainably and intelligently, a world that is coming to depend more and more on technology, a world that is slowly seeing jobs and expertise move overseas - where the work force is often better prepared than ours. So, how to bring kids into a relationship with science? We let them in on a secret – that science matters, it really does impact our lives, and the practice of science is a real life adventure. Scientists and engineers are real life heroes who will be responsible for our future, and for allowing us to realize our dreams.

How do I enter?

The *Kids' Science Challenge* is open for entries from October 1, 2010 thru February 28, 2011. You may enter by visiting **www.kidsciencechallenge.com**. You can complete the entry online, by mail or fax.

What is the entry process?

Each year the KSC selects 3 science topics and a panel of expert scientists and engineers. Kids are given the opportunity to learn more about these topics while visiting **www.kidsciencechallenge.com**. The student submits their own well-thought-out ideas to these scientists. These submissions are then judged. There are a wide variety of online tools for writing a winning entry. Team entries are encouraged. The first thousand entrants each year receive a

free Science Activity Kit with hands-on projects related to the topics. If his/her idea is chosen, the student gets to visit and collaborate with a scientist or engineer to see the idea come alive.

What are the themes for the 2010-2011 year?

MAGICAL MICROBES

They can help make electricity, biodegradable plastic, and bread. They're even helping to clean up the Gulf oil spill! Can you think of a brand new way that microbes can help us?

SENSATIONAL SOUNDS

Can you invent your own musical instrument with a brand new sound?

SUPER STUFF FOR SPORTS (materials science)

When it comes to sports, material scientists are improving equipment by leaps and bounds! Bouncier balls, faster skis, safer bike helmets: material scientists are creating them all. Now it's your turn. Can you come up with a new idea for a material or sports gear to help you play your favorite sport safer or more fun?

How is the competition judged?

The *Kids' Science Challenge* panel of judges is looking for a creative and well thought-out idea demonstrating what the entrant has learned about one of the science topics. Judges will be looking for; originality, do-ability, quality of the presentation of idea and content's relation to stated criteria. The competition is judged by participating scientists, project producers, science advisors, educators and members of the KSC Advisory Board.

What are the prizes?

A grand prize is given to a winning student (or team) in each of the science topics. The grand prize winner for each topic will win a trip to visit and work with a scientist or engineer to test their winning idea in a lab, workshop or research setting. There are also many cool runner-up prizes.

What else does the Kids Science Challenge do?

The *Kids' Science Challenge* is a tremendous resource for teachers and parents. As well as providing kids with unique and fun experiences. Visit **www.kidsciencechallenge.com** to find lesson plan ideas, fun science activities to do at home, play online games and learn fun science facts in the process. *The Kids' Science Challenge* allows kids to enter and explore the worlds of science and engineering, and gives parents and teachers a helping hand along the way.

I have more questions or want more information on a topic mentioned above. Who do I contact?

Please visit **www.kidsciencechallenge.com** to find more detailed information on the competition, the sponsors, the entry process, awards and much, much more. If you have a specific question please email *Kids' Science Challenge* at **info@kidsciencechallenge.com**.

FACT SHEET

General Information

- *The Kids' Science Challenge*, a national science competition for students in grades 3-6, was created in 2008 by Jim Metzner.
- Metzner is an award-winning producer of the **Pulse of the Planet** radio series, and many other radio programs and features.
- *The Kids' Science Challenge* is funded primarily by the National Science Foundation with additional support from the American Honda Foundation.
- The competition opens for entries October 1, 2010 and closes February 28, 2011.
- Winners are announced in early May.
- Website traffic for **pulseplanet.com** and **kidsciencechallenge.com** combined daily average for the last 2 months (August and September 2010): Hits - 25,464/day, Page Views – 10,456/day, online sessions – 2,939/day; source: Urchin.

Entry Statistics

- Entries increased from 770 in year 1 to over 1600 in year 2.
- Entries received from 27 states in year 2.
- Approximately 50% of the entries are girls.

Entry Process

- Kids can enter by completing an entry form and submitting it on line at **www.kidsciencechallenge.com** or they may download the form and mail it to the KSC.
- Each year 3 science topics are chosen. The topics this year are: sensational sounds, super stuff for sports (materials science) and magical microbes.
- Kids learn about the topics and submit their own well-thought-out ideas for a select group of scientists and engineers. There is one grand winner per topic who will visit and collaborate with the scientists and engineers in their research settings.
- Judges will be looking for; originality, do-ability, quality of the presentation of idea and content's relation to stated criteria. The competition is judged by participating scientists, project producers, science advisors and members of the KSC Advisory Board.
- Lesson plans, do-at-home science activities, science fair project ideas, games and fun facts are tools at **www.kidsciencechallenge.com** offered to parents, teachers and mentors online as they guide students in their science education.

PRESS COVERAGE

Democrat and Chronicle.com

June 19, 2010

www.democratandchronicle.com
http://www.democratandchronicle.com/print/article/20100619/NEWS01

Lyons student tours NASA as contest winner

Sean Dobbin
Staff writer

In Tyrone Hutchinson II's vision, the athletes wear full body suits equipped with oxygen tanks, while miniature windshield wipers keep the dust off the front of their masks.

After all, there's no use in trying to play a sport on the planet Mars if you can't breathe or see.

As the players dribble a magnetic basketball, the sphere would attract some of the red planet's metal-rich soil each time it hit the ground. When the ball goes through the hoop, a laser demagnetizes it for a split second, allowing the soil to drop into a bucket below.

First team to fill its bucket with soil wins.

The fifth-grader at Lyons Elementary dreamed up the game and submitted it to the Kids Science Challenge, an annual nationwide competition that aims to turn kids onto science. In March, officials informed him that "Magnetic Soil Ball" had been awarded the grand prize for the "Sports on Mars" category, beating out 739 other entries from all over the country.

"He came up with an idea that was unique for Mars," said Jim Metzner, producer of the Kids Science Challenge. "Anyone can say 'Let's just play basketball on Mars,' but he used the conditions to the advantage of the game. That, I think, is what made it a winner."

"Sports on Mars" was one of three categories in the Kids Science Challenge, along with "Detective Science" and "Bio-Inspired Design." Between the three categories, the competition received over 1,600 entries.

Tyrone's award for winning his category was an all expenses paid trip in May to NASA's Jet Propulsion Laboratory in Pasadena, Calif., where scientists created a simulation of "Magnetic Soil Ball" and an artist drew renditions of what the game might look like.

While in Pasadena, Tyrone toured the NASA facility and took a walk in the "Mars Yard," which he said was his favorite part of the trip.

"There's all this brown soil and all these rocks and they test rovers on it to see them in a real situation," said Tyrone, 11, of Lyons.

After being outfitted in a Tyvek suit and special boots, he also got up close to the actual Mars Rover, an attraction that normal visitors can only view from a distance through glass.

"Senators don't even get to do what Tyrone did," said Metzner.

As part of the challenge's grand prize, Tyrone also won a trip to Space Camp, in Huntsville, Ala., which he plans to attend some time in the future.

SDOBBIN@DemocratandChronicle.com

METRO KIDS
MetroKids | DE 4th Grader Wins Science Contest
http://www.metrokids.com/core/pagetools.php?pageid=11979&url=/Me...

DE 4th Grader Wins Science Contest

Olivia Smith Donovan, a 4th grade student at Claymont Elementary School in Claymont, DE, has won the Grand Prize for Bio Inspired Design in the national Kids' Science Challenge for 3rd-to-6th graders. Her entry topped those of more than 1,600 other kids.

Sponsored by the National Science Foundation (NSF), the contest challenges elementary students to propose problems and experiments for a select group of scientists and engineers to solve. Olivia, watched seeds twirl around as they fell from helicopter (maple) trees and wondered if this motion could be used to drop emergency parcels and personnel from great heights.

To solve this problem, she needs to determine if a twirling descent will work for packages, and if people would get too nauseous to be dropped from planes in this manner. She will now work with Christopher Viney, a professor of engineering at the University of California Merced, to learn principles of design and physics that could make her idea possible. She will also visit a lab at the University of Maryland, where engineers are creating similar types of models, to develop her prototype.

Besides her trips to the two universities, Olivia's prizes include a trip to the San Diego Zoo, a science book set from World Book, a building set and a microscope and biology kit. Her teacher, Donna Deldeo, will receive another science book set from World Book.

"The Kids' Science Challenge offers an innovative model that lets children pose research questions and suggest experiments to be conducted by real scientists and engineers," says Sandra Welch, program director in the Informal Science Education program at NSF. "Integrating traditional and new media – including science radio broadcasts, podcasts, and blogs – to engage kids in science challenges will help guide other educational efforts in the future." The Challenge was created by Jim Metzner, producer of the award-winning *Pulse of the Planet* radio series, "to encourage elementary school students to discover that science is cool!"

THE WASHINGTON POST Kid's Post
Thursday, April 2, 2009; Page C10

http://www.washingtonpost.com/wpdyn/content/article/2009/04/01/AR2009040104038.html

Students Will Try to Create a Kid-Friendly Tongue Depressor Open Your Mouth And Say 'Yummy'

-- So how often have you gone to the doctor's office and gagged on the tongue depressor?

We know it's kind of a gross topic, but it happens. Except maybe it won't in the future, thanks to some very clever Virginia fifth-graders who are among the winners of the National Science Foundation's Kids' Science Challenge.

Devin Claire Hollinger, Ian Michael Williams and Anna Xystros, students at the Cape Henry Collegiate School in Virginia Beach, will be teaming up with scientists to see if they can design a tongue depressor that will taste good, smell delicious and maybe even soothe a sore throat.

The Kids' Science Challenge asked kids in grades three through six to come up with problems that could be solved through science. More than 700 kids entered, and four winning teams will be paired with scientists to try to turn their ideas into reality.