



Student Winners Announced in Smithsonian-Cricket Media’s 5th Annual Spark! Lab Invent It Challenge

A wearable warning system that helps prevent frostbite, a massage rope to aid injured athletes, and an ingenious water filtration system are among the innovative STEM-based solutions kids have developed to solve real world health problems.

WASHINGTON, DC—May 9, 2016---ePals, a product of Cricket Media, Inc., in partnership with the Smithsonian's Lemelson Center for the Study of Invention and Innovation, is pleased to announce the winners of the 2015-2016 Spark!Lab Invent It Challenge. Top entries reflect innovative STEM solutions focused on promoting comfort and independence for the physically challenged, preventing climate-related injuries, and encouraging the use of sustainable, planet-friendly materials.

Students were asked to identify and solve a global health issue by following a specific invention process: Think It; Explore It; Sketch It; Create It; Try It; Tweak It; and Sell It. The eight winners-- four teams and four individuals-- and 20 honorable mentions were selected from more than 300 entries representing 933 students across the globe. Submissions were evaluated by a panel of judges from the Smithsonian and Cricket Media.

“These young inventors have devised brilliant solutions to health problems in their families, communities and around the world,” says Katya Andresen, CEO of Cricket Media. “We are proud and excited to showcase their innovations. Their work is a testament to their impressive creativity as well as their admirable desire to improve life for others.”

It was her older brother’s sensory disorder that inspired Pennsylvania-based Lillian, age six, to create The Blanket Friend, which incorporates soft toys, rattle noises and in her words, “zippers, buttons, crinkly stuff and more.” For a prototype, Lillian, with help from her mother and grandmother, cut two small squares and sewed them together, inserting beans for added weight. Although Lillian says she would use a softer fabric to create a bigger blanket next time, she also adds, “My brother was still very excited to try The Blanket Friend.”

Knowing that two billion people in the world drink unsafe water and that more people die from contaminated water than all forms of violence, including wars, 14-year-old Ankush was motivated to create Magic Sand, A Novel Graphene Oxide Based Water Filtration System. Using Graphene

oxide-coated sand, which is impermeable to dyes, metals and salt, but still permeable to water, the Indiana-based Ankush created an economically feasible filtration system that can cheaply purify water anywhere in the world.

Other inventions were inspired by personal experience. “Should I spend my whole winter inside in fear I may lose a finger?” asks 10-year-old South Dakota native Allie. After a brush with frostbite on her pinkie in the wake of afternoon sledding with her family, Allie was alerted to the possible dangers of frostbite, especially for older and at-risk populations. Testing out multiple solutions, she found a successful formula in a sensor that connects snow gloves to a headphone warning system in a hat which beeps in advance of the onset of frostbite.

There are approximately 285 million people worldwide with low vision or blindness and two million completely blind individuals in Pakistan alone. Amin, who is 11 and lives in Sindh, Pakistan, wanted to promote the independence of these people. Understanding that taking medicine in liquid form requires the help of an assistant, Amin created a special measuring cup that attaches to a battery, which buzzes when the cup is filled to the right amount.

Sweeping the user votes for the ePals Choice Award this year, with a record one million votes out of nearly two million, was the Massage Rope created by the New Jersey-based team of: Mia, 10; Dominic, 11; Cole, 11; Alice, 11; and Sophia, 10. The rope, made of recyclable braided plastic bags, and rotating wooden spools, is designed to help injured athletes stay in shape while recovering from leg injuries.

Top winners this year include students from the U.S., Pakistan and Colombia. Winners of honorable mentions represent the U.S., China, India, Pakistan, Colombia, and Canada.

The full list of top winning Individual inventions, by age, include:

- The Blanket Friend—Lillian, 6— Pennsylvania Leadership Charter School, West Chester, PA
- Frost Stopper, Youth or Adult Frostbite Warning System—Allie, 10-- Robert Frost Challenge Center, Sioux Falls, SD
- Medicine Level Indicator—Amin, 11-- Beacon House School System, Karachi, Pakistan
- Magic Sand—A Novel Graphene Oxide Based Water Filtration System—Ankush, 14-- Castle North Middle School, Neuburgh, IN

The full list of top winning Team inventions by age include:

- Plant Saver—5- 7— Notre Dame Academy Elementary School, Los Angeles, CA USA
- The Massage Rope-- 8-10—John F. Kennedy Elementary School, Wayne NJ USA (2015-2016 ePals Choice Award Winner!)
- Echo-see-- 11 – 13— Mosby Woods Elementary, Fairfax, VA USA
- Filthermo—14-21—Montessori School, Medellin, Antioquia, Colombia

Videos and other details of the top winning inventions and the 20 honorable mentions are available [here](#).

“The Smithsonian is delighted with this annual opportunity to encourage the creativity of students on a global scale and to guide them through the invention process,” says Tricia Edwards, Lemelson Center’s Head of Education. “We believe kids are natural-born innovators and can contribute meaningfully to solving real and serious problems in the world. Playing an active role in helping them do that is very satisfying and important to us.”

This year’s prizes for selected winners include a Camp Invention® scholarship, LEGO® kit, books from Smithsonian, a Boardr Boys Skateboard Starter Kit, and subscriptions to Cricket Media's Science Magazines. Selected winners will also receive a consultation for an official patent filing with the law firm Nelson Mullins Riley & Scarborough, LLP. “We are pleased to participate pro bono in events that encourage young inventors and entrepreneurs,” says Richard Riley. Adds Neil Jones, “Nelson Mullins fully supports this program and I, personally, look forward to working with the eligible winners.”

ABOUT CRICKET MEDIA

Cricket Media is an education media company that provides award-winning content on a safe and secure learning network for children, families and teachers across the world. Cricket Media’s 11 popular media brands for toddlers to teens include Babybug®, Ladybug®, Cricket™ and Cobblestone™. The Company’s innovative web-based K12 tools for school and home include the ePals community and virtual classroom for global collaboration as well as In2Books®, a Common Core eMentoring program that builds reading, writing and critical thinking skills. Cricket Media serves millions of teachers, students and parents in over 200 countries and territories through its platform and NeuPals, its joint venture with China’s leading IT services company Neusoft. Cricket Media also licenses its content and platform to top publishing and educational companies worldwide. For more information, please visit <http://www.cricketmedia.com>.

ABOUT SPARK!LAB

Spark!Lab is a hands-on invention activity space operated by the Jerome and Dorothy Lemelson Center for the Study of Invention and Innovation at the Smithsonian's National Museum of American History. The Lemelson Center engages, educates, and empowers the public to participate in technological, economic, and social change. The Center undertakes historical research, develops educational initiatives, creates exhibitions, and hosts public programming to advance new perspectives on invention and innovation and to foster interactions between the public and inventors.

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