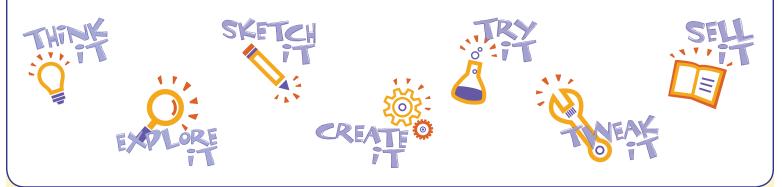


Spark!Lab Dr. InBae Yoon Invent It Challenge

Think about a new and innovative way to provide **natural disaster preparation or relief**.

Follow the Spark!Lab 7-step Process of Invention:



Why take part in the Invent It Challenge?

Students:

Teachers:

- Learn how an inventor thinks!
- Share your invention with the world!
- Meet other inventors!

- Engage students in a motivational STEM learning experience
- Bring Smithsonian expertise and resources into your classroom
- Get free ready-to-use teaching materials

Who can take part?

Museum of American History

Challengers may enter individually or as part of a team in the following 4 age groups:

Age group 1: 5-7 years	Age group 3: 11-13 years
Age group 2: 8-10 years	Age group 4: 14-21 years

Visit challenges.epals.com for complete entry details and official rules.

Prize Providers



	January 31	April 9	May 8	May 22*	June 28-30
Timeline	•	•	•	•	•
	Official Start	Submission	Winners	ePals Choice	Winners Trip
	(Kid Inventor's Day)	Deadline	Announced	Winner Announced	to DC*

*Winners trip to DC includes workshops and a celebratory dinner with the Yoon family.

challenges.epals.com/inventit2018

Standards Alignment: Invent It Challenge







ISTE NETS'S Standards http://www.iste.org/ standards/ standards-for-students	Next Generation Science Standards http://www.nextgenscience.org	National Association for Environmental Education Guidelines for Excellence http://bit.ly/2dZuaAO	21st Century Learning Standards www.p21.org	Common Core State Standards for English Language Arts www.corestandards.org	STEAM www.steamedu.com
 Creativity and Innovation Communication and Collaboration Research and Information Fluency Critical Thinking, Problem Solving, and Decision Making 	 Dimension 1: Practices Asking questions; Developing and using models; Planning and carrying out investigations; Analyzing and interpreting data; Constructing explanations and designing solutions; Engaging in argument form evidence; Obtaining, evaluating and communicating information Dimension 2: Crosscutting Concepts Cause and Effect Systems and system models Energy and Matter: Flows, cycles, and conservation Stability and Change Dimension 3: Disciplinary Core Ideas Life Science LS2: Ecosystems: Interactions, Energy, Dynamics Earth Science ESS2-Earth's Systems Physical Science PS3 Energy Engineering & Technology ETS1 Engineering Design 	 Strand 1: Questioning, Analysis, and Interpretation Skills Strand 2: Knowledge of Environmental Processes and Systems Strand 3: Skills for Understanding and Addressing Environmental Issues Strand 4: Personal and Civic Responsibility 	 Learning and Innovation Skills Creativity and Innovation Critical Thinking and Problem Solving Communication and Collaboration Information, Media and Technology Skills Information Literacy Media Literacy ICT (Information, Communications and Technology) Literacy Life and Career Skills Initiative and Self-Direction Productivity and Accountability 	 <u>CCSS.ELA -Literacy.CCRA.W.4</u> Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. <u>CCSS.ELA -Literacy.CCRA.W.6</u> Use technology, including the Internet, to produce and publish writing and to interact and collaborate with others. <u>CCSS.ELA -Literacy.CCRA.W.7</u> Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation. <u>CCSS.ELA -Literacy.CC RA.W.8</u> Gather relevant information from multiple print and digital sources, assess the credibility and accuracy of each source, and integrate the information while avoiding plagiarism. <u>CCSS.ELA -Literacy.CC RA.W.9</u> Draw evidence from literary or informational texts to support analysis, reflection, and research. <u>CCSS.ELA -Literacy.CC RA.SL.5</u> Make strategic use of digital media and visual displays of data to express information and enhance understanding of presentations. 	 Science Conduct scientific inquiry through the Spark!Lab Process of Inquiry Technology Conduct online research Communicate an invention idea through a digital presentation Engineering Solve a problem Design an invention Build a prototype Arts Imagine and sketch an invention Create a 3-D prototype Math Measure and create a scale model of the invention Analyze data to refine invention