

STEM Competitions and Programs for Teachers and Students

Broadcom MASTERS (6-8) - <https://student.societyforscience.org/broadcom-masters-faq> - Broadcom MASTERS (Math, Applied Science, Technology and Engineering Rising Stars), is the premier middle school science and engineering fair competition. SSP affiliated science fairs around the country nominate the top 10% of 6th, 7th and 8th grade students to enter this prestigious competition. After submitting the online application, 300 semifinalists are selected and 30 finalists are brought to Washington, DC. Finalists present their research projects and compete in team hands-on STEM challenges to demonstrate their skills in critical thinking, collaboration, communication and creativity. (NOTE: SARSEF is an affiliated fair.)

Future Cities (6-8) - <http://futurecity.org/> - The Future City Competition is a national, project-based learning experience where students in 6th, 7th, and 8th grade imagine, design, and build cities of the future. Students work as a team with an educator and engineer mentor to plan cities using SimCity™ software; research and write solutions to an engineering problem; build tabletop scale models with recycled materials; and present their ideas before judges at Regional Competitions in January. Regional winners represent their region at the National Finals in Washington, DC in February.

Science Olympiad (K-12) - <http://soinc.org/> - Science Olympiad comes in many shapes and sizes to fit all your needs. At the K-6 level, try an Elementary Science Olympiad (ESO) program, which can come in the form of a competitive tournament, a hands-on science Fun Day or an expert-filled Science Olympiad Fun Night. In grades 6-12, Science Olympiad functions much like a football or soccer team, requiring preparation, commitment, coaching and practice throughout the year. Each school-based team is allowed to bring 15 students who cross-train for a variety of events in their skill set, but some school clubs and boast more than 75 members, allowing for a rich apprentice and mentoring system for all involved.

Team America Rocketry Challenge (7-12) - <http://www.rocketcontest.org/> - The Team America Rocketry Challenge (TARC) is the world's largest rocket contest, sponsored by the Aerospace Industries Association (AIA) and the National Association of Rocketry (NAR). Teams design, build and fly a model rocket that reaches a specific altitude and duration determined by a set of rules developed each year. The contest is designed to encourage students to study math and science and pursue careers in aerospace.

Intel Science and Engineering Fair (9-12) - <http://www.intel.com/content/www/us/en/education/competitions/international-science-and-engineering-fair.html> - Each year, approximately 7 million high school students around the globe develop original research projects and present their work at local science competitions with the hope of making it to the Intel International Science and Engineering Fair, a program of Society for Science & the Public. Only the best and brightest—nearly 1,800 winners of local, regional, state, and national competitions—are

invited to participate in this week-long celebration of science, technology, engineering, and math. At the event, these young innovators share ideas, showcase cutting-edge research, and compete for more than USD 5 million in awards and scholarships.

Southern Arizona Science and Engineering Fair (K-12) - <https://sarsef.org/> - The local regional for ISEF above. Phenomenal step-by-step guides for students and teachers. SARSEF will also come to schools to provide free training for students and teachers.

Intel Science Talent Search (Seniors in High School) -

<https://student.societyforscience.org/intel-sts> - The Intel Science Talent Search (Intel STS), a program of Society for Science & the Public (SSP) is the nation's most prestigious science research competition for high school seniors. Since 1942, first in partnership with Westinghouse and since 1998 with Intel, SSP has provided a national stage for the country's best and brightest young scientists to present original research to nationally recognized professional scientists.

FIRST Robotics (9-12) - <http://www.usfirst.org/roboticsprograms/frc> - The varsity Sport for the Mind™, FRC combines the excitement of sport with the rigors of science and technology. Under strict rules, limited resources, and time limits, teams of 25 students or more are challenged to raise funds, design a team "brand," hone teamwork skills, and build and program robots to perform prescribed tasks against a field of competitors. It's as close to "real-world engineering" as a student can get. Volunteer professional mentors lend their time and talents to guide each team.

FIRST Tech Challenge (7-12) - <http://www.usfirst.org/roboticsprograms/ftc> - FTC is designed for students in grades 7-12 to compete head to head, using a sports model. Teams are responsible for designing, building, and programming their robots to compete in an alliance format against other teams. The robot kit is reusable from year-to-year and is programmed using a variety of languages. Teams, including coaches, mentors and volunteers, are required to develop strategy and build robots based on sound engineering principles. Awards are given for the competition as well as for community outreach, design, and other real-world accomplishments.

FIRST Lego League (4-8) - <http://www.usfirst.org/roboticsprograms/fll> - Introduces younger students to real-world engineering challenges by building LEGO-based robots to complete tasks on a thematic playing surface. FLL teams, guided by their imaginations and adult coaches, discover exciting career possibilities and, through the process, learn to make positive contributions to society.

Junior FIRST LEGO League (K-3) - <http://www.usfirst.org/roboticsprograms/jr.fl> - For children ages 6-9, Junior FIRST® LEGO® League (Jr.FLL®) captures young children's curiosity and directs it toward discovering the wonders of science and technology. This program features a real-world scientific concept to be explored through research, teamwork, construction, and imagination. Guided by adult Coaches, teams use LEGO® bricks to build a model that moves and develop a Show Me Poster to illustrate their journey.

Junior Science and Humanities Symposium (9-12) - <http://www.jshs.org/> - JSHS is designed to challenge and engage students (Grades 9-12) in science, technology,

engineering or mathematics (STEM). Individual students compete for scholarships and recognition by presenting the results of their original research efforts before a panel of judges and an audience of their peers. Opportunities for hands-on workshops, panel discussions, career exploration, research lab visits and networking are planned.

Siemens We Can Change the World Challenge (K-12) - <http://www.wecanchange.com/>
- The Siemens We Can Change the World Challenge is the premier national environmental sustainability competition for grades K-12 students. Through project-based learning, students learn about science and conservation while creating solutions that impact their planet. Beginning August 13, 2013 through March 4, 2014, teams from across the country will be challenged to create sustainable, reproducible environmental improvements in their local communities.

Siemens Competition (9-12) - <http://www.siemens-foundation.org/en/competition.htm>
- The Siemens Competition in Math, Science & Technology recognizes remarkable talent early on, fostering individual growth for high school students who are willing to challenge themselves through science research. Through this competition, students have an opportunity to achieve national recognition for science research projects that they complete in high school.

Siemens Science Day (K-6) - <http://siemensscienceday.discoveryeducation.com/> - The Siemens Science Day website offers a variety of tools and resources that will help you reinvent science class. You'll find new, original hands-on activities and supporting videos, a teacher support center with best practice guides, monthly themes and an Ultimate Cool School sweepstakes.

ExploraVision (K-12) - <http://www.exploravision.org/> - ExploraVision is a science competition that goes beyond the typical student science competition and into what it takes to bring ideas to reality. A teacher will sponsor and lead his/her students as they work in groups of 2 – 4 to simulate real research and development. A teacher will guide his or her students as they pick a current technology, research it, envision what it might look like in 20 years, and describe the development steps, pros & cons, and obstacles. Past winners have envisioned technologies ranging from a hand-held food allergen detector to a new device to help people who have lost limbs regain movement in real time.

U.S. Department of Energy Science Bowl (6-12) - <http://science.energy.gov/wdts/nsb/> - The National Science Bowl (NSB) is a highly competitive science education and academic event among teams of high school and middle school students who compete in a fast-paced verbal forum to solve technical problems and answer questions in all branches of science and math. Each team is composed of four students, one alternate student, and a coach. Regional and national events encourage student involvement in math and science activities of importance to the Department of Energy and the Nation. The National Science Bowl for Middle School Students was started in 2002 and includes two types of competitions - an academic math and science competition and a model car race. The car race provides the

students with a “hands-on” science and engineering experience where the teams design, build, and race their model cars.

MATHCOUNTS Competition Series (6-8) - <http://mathcounts.org/> - The MATHCOUNTS Competition Series strives to engage middle school students of all ability and interest levels in fun, challenging math programs, in order to expand their academic and professional opportunities. Middle school students exist at a critical juncture in which their love for mathematics must be nurtured, or their fear of mathematics must be overcome. MATHCOUNTS provides students with the kinds of experiences that foster growth and transcend fear to lay a foundation for future success.

The National Math Club (6-8) - <http://mathcounts.org/programs/math-club> - The National Math Club is an inclusive math enrichment program that provides Club Leaders with the resources and materials needed to run a math club. With registration open to schools, organizations and other groups, The National Math Club brings fun and exciting math to students across the country. The National Math Club helps build confidence in students of all ability and interest levels by giving them the opportunity to engage in unique math activities in a relaxed, social setting.

Math Video Challenge (6-8) - <http://videochallenge.mathcounts.org/> - The Math Video Challenge is an innovative program involving teams of students using technology to create videos about math problems and their real-world application. This competition excites students about math while allowing them to hone their creativity and communication skills.

CyberPatriot National Youth Cyber Defense Competition (6-12) - <https://www.uscyberpatriot.org/> - The National Youth Cyber Defense Competition puts teams of high school and middle school students in the position of newly hired IT professionals tasked with managing the network of a small company. In the rounds of competition, teams are given a set of virtual images that represent operating systems and are tasked with finding cybersecurity vulnerabilities within the images and hardening the system while maintaining critical services. Teams compete for the top placement within their state and region, and the top teams in the nation earn all-expenses paid trips to Washington, DC for the National Finals Competition where they can earn national recognition and scholarship money.

Solar Car Challenge (9-12) - <http://www.solarcarchallenge.org/challenge/> - The Solar Car Challenge was established in 1993 to help motivate students in science and engineering, and to increase alternative energy awareness. The Challenge teaches high school students around the world how to build roadworthy solar cars. The Solar Education Program provides a safe environment for teams to display their solar cars. On alternating years, we share the fun of the world-famous Texas Motor Speedway or drive cross-country to share their projects with millions of people.

SeaPerch (6-12) - <http://www.seaperch.org/index> - SeaPerch is an innovative underwater robotics program that equips teachers and students with the resources they need to build an underwater Remotely Operated Vehicle (ROV) in an in-school or out-of-

school setting. Students build the ROV from a kit comprised of low-cost, easily accessible parts, following a curriculum that teaches basic engineering and science concepts with a marine engineering theme. The SeaPerch Program provides students with the opportunity to learn about robotics, engineering, science, and mathematics (STEM) while building an underwater ROV as part of a science and engineering technology curriculum. Throughout the project, students will learn engineering concepts, problem solving, teamwork, and technical applications. Building a SeaPerch ROV teaches basic skills in ship and submarine design and encourages students to explore naval architecture and marine and ocean engineering principles. It also teaches basic science and engineering concepts and tool safety and technical procedures. Students learn important engineering and design skills and are exposed to all the exciting careers that are possible in naval architecture and naval, ocean, and marine engineering.

eCybermission (6-9) – <https://www.ecybermission.com/> - eCYBERMISSION is a web-based Science, Technology, Engineering and Mathematics competition for 6th, 7th, 8th and 9th grade teams. Your team will propose a solution to a real problem in your community and compete for State, Regional and National Awards. eCYBERMISSION challenges you to explore how Science, Technology, Engineering and Mathematics work in your world.

Racing the Sun Solar Go-Kart Competition (Southern Arizona 9-12) - <http://racingthesun.net/> - Racing the Sun is a solar go-kart competition for high school students. Designed as a STEEM program (Science, Technology, Engineering, Entrepreneurship and Math), the competition uses solar energy as the organizing technology. The competition links industry and students to work collaboratively to design and test basic engineering and science concepts and encourage students in STEM.

Ten80 Education (K-12) - <http://www.ten80education.com/> See below for breakdown of grade specific programs.

RhombSTEAM (K-2) - Introduce students to Rhombi with story books and geometry-focused STEAM modules. Science, Technology, RhombSTEAM is a long-range project with short-term modules and single-day activities. Students are ultimately working to meet the challenges of Rhombi's life on SciQ Island. RhombSTEAM builds from the simple need to construct a "home" to the very complex structures required to bridge a river.

RhombSTEAM presents "literacy components, cross-cutting standards and authentic assessment with math at every turn and corner (as well as edge and vertex). Outcomes require patience to design reasonable solutions to real-world problems." In the process, students use core skills in aesthetically beautiful, project-based learning. Fabrication requires the development of a logical sequence and network: build spatial awareness; use math skills in real world challenges; develop problem-solving tools; increase manual dexterity and attention to detail.

Math2Go & MindBugs (3-6) - Students in Grades 3-6 are introduced to math modeling through the excitement of racing. Small radio-controlled cars engage kids while building deeper understanding of STEM and teamwork. Support core curriculum requirements for inquiry based math modeling on a small-scale classroom race track.

National STEM League (6-12) - Middle and high school students are invited to own their own team or business that specializes in race engineering, open source robotics, energy or combining software and hardware to innovate new things. There are four NSL Challenges: **Racing Challenge** – Engineer a fast, efficient and stable car to perform on road, oval and drag courses. The base technology is a 1:10 scale, electric radio-controlled car that has over 4 million setup options ... before re-designing a single part!

Rover Challenge – Teach a robot to navigate and map a maze. The base technology is an Arduino-driven, 4-wheel or tread driven rover. In 2015, teach the rover to teach an unmanned aerial vehicle to navigate a course.

Energy Challenge – Make a big impact in your community or an activity by transitioning from traditional to renewable sources or improving energy efficiency.

Innovation Challenge – Combine hardware and software to solve a problem or innovate something new the world didn't know it wanted.

Each challenge provides curriculum aligned to the Common Core and Next Generation Science Standards cross-cutting concepts. The curriculum can be implemented in math, science, STEM courses, clubs and camps.

American Association of Physics Teachers – U.S. Physics Team (9-12) -

<http://www.aapt.org/physicsteam/2014/index.cfm> - Each year, AAPT and the American Institute of Physics (AIP) sponsor a competition for high school students to represent the United States at the 2014 International Physics Olympiad Competition. The mission of the U.S. Physics Team Program is to promote and demonstrate academic excellence through preparation for and participation in the International Physics Olympiad. Preliminary Exam: The $F=ma$ contest. Multiple-choice only, focusing on mechanics; problems can be solved without the use of calculus. Exam time: 75 minutes (allow 90 minutes total to administer the exam). We strongly encourage you to have your physics students participate in this part of the contest and are certain that they will benefit from participating in an international educational forum.

Google Science Fair (ages 13-18) - <https://www.google-sciencefair.com/en/> - The Google Science Fair is a global online science and technology competition open to individuals and teams from ages 13 to 18. Find out what you can win, and learn more about the people involved with the competition. Students sign up for the Science Fair with a free Google account at GoogleScienceFair.com. They'll then carry out a test or experiment on a subject they're passionate about, and submit their project online. The submissions deadline is in May 2015. There's a whole section of our website dedicated to helping participants through the competition.

Mathematics, Engineering, Science Achievement (MESA) (Arizona 6-12) -

<http://azmesa.arizona.edu/index.html> - Mathematics, Engineering, Science Achievement (MESA) is a university-based outreach program operating in 8 states. In Arizona, MESA strives to provide an opportunity for ethnic minority, low income, and first generation college-bound students to explore college majors and career interests with a group of peers interested in attending college. The University of Arizona supports MESA schools in Southern Arizona and works in affiliation with Arizona State University's Fulton Schools of

Engineering to support MESA in central Arizona. The southern and central regions form Arizona MESA. MESA promotes a strong academic foundation in mathematics and science as the key to college admission and success. Hands-on activities and team competitions focused on mathematics, engineering, and science are highlighted in order to increase students' confidence in these areas.

Available in seven other states:

Washington MESA - <http://depts.washington.edu/mesaweb/>

Oregon MESA - <http://oregonmesa.org/>

California MESA - <http://mesa.ucop.edu/>

Utah MESA - <http://www.schools.utah.gov/fsp/MESA.aspx>

New Mexico MESA - <http://www.nmmesa.org/>

Colorado MESA - <http://www.cmesa.org/>

Illinois MESA - <http://www.csu.edu/cas/chemistryphysicsengineering/engineeringstudies/mesa.htm>

Maryland MESA - <http://www.jhuapl.edu/MESA/home/default.asp>

Pennsylvania MESA - <http://engineering.temple.edu/department/stem-education-pennsylvania-mesa>

Zayed Future Energy Prize – Global High School Prize (9-12) -

http://www.zayedfutureenergyprize.com/en/prize-categories/global_high_school_prize/ -

The primary aim of the Global High Schools category is to inspire future generations across the globe by instilling an ethos of sustainability from an early age, including an appreciation of issues in energy, and broader sustainability. The Global High Schools category will therefore not focus on past activities of the school. Instead, each school will submit a detailed proposal for a project, and the Prize will become a grant that enables the project's completion. While the main objective is to promote sustainability in schools, special emphasis of the proposed project should be on specific measurable initiatives to promote renewable energy and sustainability, which may include improvements in energy or water efficiency, or a reduction in waste.

Caine's Arcade Global Cardboard Challenge (preK-12) - <http://imagination.is/our-projects/cardboard-challenge/>

- Inspired by the short film, 'Caine's Arcade', the Global Cardboard Challenge is an annual event presented by the Imagination Foundation that celebrates child creativity and the role communities can play in fostering it. This September, kids of all ages are invited to build anything they can dream up using cardboard, recycled materials and imagination. Then on Saturday, October 11th, 2014, communities will come together to play!

U.S. Department of Education Green Ribbon Schools (K-12) -

<http://www2.ed.gov/programs/green-ribbon-schools/index.html> - The aim of U.S.

Department of Education Green Ribbon Schools (ED-GRS) is to inspire schools, districts and Institutions of Higher Education (IHEs) to strive for 21st century excellence, by highlighting exemplary practices and resources that all can employ. To that end, the award recognizes schools, districts, and IHEs that:

1. Reduce environmental impact and costs;
2. Improve the health and wellness of schools, students, and staff; and

3. Provide environmental education, which teaches many disciplines, and is especially good at effectively incorporating STEM, civic skills, and green career pathways

NEED (National Energy Education Development) Project Youth Awards (K-12) - <http://www.need.org/content.asp?contentid=42> – All NEED schools have outstanding classroom-based programs in which students learn about energy. Some schools have student leaders who extend these activities into their communities. To recognize outstanding achievement and reward student leadership, The NEED Project conducts the National Youth Awards Program for Energy Achievement. This program combines academic competition with recognition to acknowledge everyone involved in NEED during the year - and to recognize those who achieve excellence in energy education in their schools and communities. The students and teachers set goals and objectives, and keep a record of their activities. In April, the students combine their materials into scrapbooks and send them to their state coordinators. The students themselves write summaries of their projects for inclusion in the Annual Report.

President's Environmental Youth Award (K-12) -

<http://www2.epa.gov/education/presidents-environmental-youth-award> - The PEYA program promotes awareness of our nation's natural resources and encourages positive community involvement. Since 1971, the President of the United States has joined with EPA to recognize young people across the U.S. for protecting our nation's air, water, land, and ecology. It is one of the most important ways EPA and the Administration demonstrate commitment to environmental stewardship efforts created and conducted by our nation's young people. One outstanding project from each region is selected for national recognition. Projects are developed by young individuals, school classes (K-12), summer camps, and youth organizations to promote environmental stewardship. Thousands of young people from all 50 states and the U.S. territories have submitted projects to EPA for consideration.

Academic Decathlon (9-12) - <http://www.usad.org/> - Academic Decathlon® isn't about any of that, though. It's not about demonstrating how good a student you already are. It's about daring to push your limits, to master college-level material and to practice skills, like public speaking, that might be wholly new to you. It's about the people you'll meet along the way—the coaches who will mentor you, the competitors who will challenge you, and the teammates who will become your lifelong friends.

Eco-Schools USA (K-12) - <http://www.nwf.org/Eco-Schools-USA/Become-an-Eco-School/Pathways.aspx> - Through school-based action teams of students, administrators, educators and community volunteers, Eco-Schools combines effective "green" management of the school grounds, facilities and the curriculum. Schools that are certified in the program undergo a thorough application process and succeed in organizing and implementing a comprehensive assessment of their school. The Eco-Schools USA program is made up of seven steps, incorporating a variety of environmental pathways. Once a school has registered and implemented these seven steps, it can apply for an Eco-Schools award. There are three levels of the award system. The first two levels are the Bronze and Silver awards which are self-assessed. The top level is the Green Flag award, which must be

assessed by an Eco-Schools USA assessor and renewed every two years. A school is considered to be a permanent Eco-School once it has gained its fourth Green Flag.

TEAMS (Tests of Engineering Aptitude, Mathematics and Science) (6-12) -

<http://teams.tsaweb.org/> - Tests of Engineering Aptitude, Mathematics, and Science (TEAMS) is an annual competition for middle and high school students designed to help them discover their potential for engineering. During this one-day competition, students apply math and science knowledge in practical, creative ways to solve real-world engineering challenges.

VEX Robotics (6-12) - <http://www.vexrobotics.com/vex> - The VEX Robotics Design System offers students an exciting platform for learning about areas rich with career opportunities spanning science, technology, engineering and math (STEM). These are just a few of the many fields students can explore by creating with VEX Robotics technology. Beyond science and engineering principles, a VEX Robotics project encourages teamwork, leadership and problem solving among groups. It also allows educators to easily customize projects to meet the level of students' abilities. The affordable VEX platform is expanding rapidly and is now found in middle schools, high schools and university labs around the globe. Robotics hobbyists also appreciate the advanced capabilities of the VEX System.

VEX IQ (K-8) - <http://www.vexrobotics.com/vexiq> - VEX IQ is a robotics platform designed to transform STEM learning for young students and their teachers. Students as young as 8 can jump right in and snap robots together using this intuitive, toolless platform while educators can utilize the free VEX IQ Curriculum to help teach them valuable lessons and skills that are needed in today's changing world. The VEX IQ Challenge, presented by the Robotics Education & Competition Foundation, gives students affordable access to the inspiration, excitement and learning that comes from participating in a STEM challenge.

Junior Solar Sprint (5-8) - <http://jrsolarsprint.org/> - Through Junior Solar Sprint, students develop teamwork and problem solving abilities, investigate environmental issues, gain hands-on engineering skills, and use principles of science and math to get the fastest, most interesting, and best crafted vehicle possible. JSS challenges students to use scientific know-how, creative thinking, experimentation and teamwork to design and build and race high-performance solar electric vehicles. Students learn by doing.

SunWise SHADE Poster Contest (K-8) - <http://www2.epa.gov/sunwise/sunwise-shade-poster-contest> - The annual SunWise with SHADE Poster Contest is a collaboration between the SHADE Foundation of America and the U.S. Environmental Protection Agency (EPA) SunWise Program. The goal of the contest is to raise awareness about sun safety and promote creative health and environmental education for K-8 students across the U.S.

Verizon Innovative App Challenge (6-12) - <http://appchallenge.tsaweb.org/> - The Verizon Innovative App Challenge is an exciting, creative and collaborative competition that offers \$20,000 grants for winning middle schools and high schools and Samsung Galaxy Tabs for students on the winning teams. Designed to ignite students' interest in science, technology, engineering and math (STEM), the Challenge shows students exciting new possibilities for their futures, opening doors they may never have known were there.

Envirothon (9-12) - <http://www.envirothon.org/> - The North American Envirothon is an annual competition for high school-aged students conducted over five consecutive days every summer during July or August. To expose students to diverse environmental issues, ecosystems, and topography the North American Envirothon is hosted in a different location each year. Teams from participating states and Canadian provinces, who have won their state or provincial event, compete for recognition and scholarships by demonstrating their knowledge of environmental science and natural resource management. The teams, each consisting of five members, work to demonstrate their knowledge of environmental science and natural resource management at five training/testing stations.

The Gloria Barron Prize for Young Heroes (K-12) - <http://barronprize.org/> - The Gloria Barron Prize for Young Heroes celebrates outstanding young leaders. Each year the Barron Prize honors 25 inspiring young people who have made a significant positive difference to people and our planet. These young people reflect great diversity: They are female and male, urban and rural, and from many races and backgrounds.

U.S. Stockholm Junior Water Prize (9-12) - <http://www.wef.org/sjwp/> - The Stockholm Junior Water Prize (SJWP) is the world's most prestigious youth award for a water-related science project. The prize taps into the unlimited potential of today's high school students as they seek to address current and future water challenges.

International Young Eco-Hero Awards (ages 8-16) - http://www.actionfornature.org/ecohero_awards.aspx - Have you been working to preserve the world around you? Have you been teaching others how to protect the environment? Have you been doing an environmental research project? If your answer to any of these questions is yes, then you are a Young Eco-Hero. All Eco-Heroes serve as role models, showing others that individuals are important and can make a difference. Action For Nature is proud to honor the work of young people between the ages of 8 and 16 who have done creative environmental projects. The winners of AFN's International Young Eco-Hero Awards program receive a cash prize and a special certificate, as well as public recognition on our website and elsewhere.

Styrofoam Cup Competition (K-12) - <http://joidesresolution.org/node/3596> - Enter this year's J-aRt Contest and show us your EXTREME creativity! Winning cup masterpieces will be sent down to the seafloor, where the intense pressure will shrink them!

NASA Exploration Design Challenge (K-12) - <http://www.nasa.gov/audience/foreducators/spacelife/explorationdesign/overview/> - The goal of the Exploration Design Challenge is for students to research and design ways to protect astronauts from space radiation. NASA and Lockheed Martin are developing the Orion spacecraft that will carry astronauts beyond low Earth orbit and on to an asteroid or Mars. Protecting astronauts from radiation on these distant travels is an important -- and very real -- problem that needs solving. NASA would like your help!

Conrad Spirit of Innovation Challenge (Ages 13-18 and 19-25) - <http://www.conradchallenge.org/> - The Conrad Spirit of Innovation Challenge (Conrad

Challenge) was founded by Nancy Conrad in honor of her late husband, astronaut, innovator, and entrepreneur, Charles “Pete” Conrad Jr. The Conrad Challenge is an annual, multi-phase innovation and entrepreneurial competition that brings together a dynamic community of innovators and entrepreneurs driving a collaborative movement to develop extraordinary and viable solutions to benefit our world in one of four areas: Aerospace & Aviation, Cyber Technology & Security, Energy & Environment, and Health & Nutrition. Participants work together in teams of 2-5 members to develop solutions to some of the world’s most complex problems.

