

Design Competitions

[Toshiba/NSTA ExploraVision Grades K-12](#)

ExploraVision is a hands-on, minds-on science competition that simulates real research and development to inspire students and fuel imagination. Teams choose a technology that is relevant to the world today, explore what it does, how it works and how, when and why it was invented. Teams then imagine their chosen technology 20 years from now and prepare an in-depth report that conveys their visions to others. Exploravision can be done as an afterschool activity or embedded into science curriculum.

[First Lego League Robotics Grades 3-8](#)

A robotics program for 9 to 14 year olds that involves building, testing and programming robots made entirely out of LEGOS. Each year teams work to solve the year's two-part challenge: the "Robot Game" and the "Project." Teams score points as their robot successfully completes various tasks on the themed playing field (Robot Game) and by presenting their solution to the problem they identified (Project). Teams may then choose to attend an official tournament hosted by a local partner, [Maine Robotics](#)

Junior Solar Sprint Grades 6-8

Teams work together to build model solar cars with guidance from a coach (parent or teacher) and compete in race and design categories. The competition helps improve students' understanding of scientific concepts and renewable energy technologies, and introduces young people to technical careers involving science, technology, engineering and math (STEM) skills. [The Maine Energy Education Program \(MEEP\)](#) offers classroom and training support to educators that want to participate and organize local and state JSS competitions.

[Kids' Science Challenge Grades 3-6](#)

A free, nationwide competition for upper elementary age students. Students submit experiments and problems for practicing scientists and engineers to solve. Students research the topics; brainstorm ideas, experiments or problems; and submit their ideas or experiments for scientists to solve. The winning students are given the opportunity to work with a practicing scientist to bring their ideas to life.

[Maine Wind Blade Challenge Grades 9-12](#)

Teams explore composite manufacturing technologies and wind energy concepts as they research, design, and manufacture the most efficient model wind turbine blades possible. The challenge partners participating students with advanced composites manufacturers in Maine and is organized by the Maine Composites Alliance in partnership with the Maine Wind Industry Initiative and UMaine's AEWIC.

[Wind Storm Challenge Grades 6-12](#)

Inspired by the deepwater offshore wind energy research being conducted by the University of Maine-led DeepCWind Consortium, this competition focuses on deepwater offshore wind technology. The Wind Storm Challenge asks teams of middle and high school students to design and construct a floating platform for a scale model wind turbine and deliver a business plan and sales pitch to a panel of expert judges. The program is offered both as a statewide competition in May and as an intensive high school internship during the summer.

[NASA Grades K-12](#)

NASA has numerous opportunities for K-12 students to try their hand at solving problems related to specific space missions and issues. A listing of these design competitions can be found by selecting the "For Students" tab in the upper left of NASA's home page. Competitions change from year to year so be sure to check back often.