**STEM resources: Competitions & fairs**

FIRST LEGO League

Robotics competition which involves LEGOs, with different levels from preK-grade8.

<https://www.firstinspires.org/robotics/fll>

FIRST Tech Challenge

Robotics competition focusing on building, coding, etc. Can be done as a class. Grades 7 – 12.

<https://www.firstinspires.org/robotics/ftc>

 FIRST Robotics Competition

Robotics competition with a more sport-like atmosphere. High school. Typically, tech-based companies will partner with high school students to design & build the robots which must perform certain tasks in an arena-like setting.

<https://www.firstinspires.org/robotics/frc>

Chowdhury STEM Innovation Contest

Students in grades 4 – 8 choose a real-world issue, do research, & design a solution.

<https://www.sae.org/learn/education/chowdhury-stem-innovation-contest>

Discovery Education 3M Young Scientist Challenge

Students grades 5 – 8 create a short video of a solution to an everyday problem.

<https://www.youngscientistlab.com/challenge>

Future Problem Solving Program International

For grades 4 – 12, includes both curriculum & competitive components.

<https://www.fpspi.org/>

eCyberMission

Grades 6 – 9, using STEM to tackle problems in their community. The competition is virtual.

<https://www.ecybermission.com/>

Society for Science

Collection of affiliated science fairs, middle school & high school.

<https://www.societyforscience.org/isef/affiliated-fair-network/>

Zero Robotics Tournaments

Open to middle & high school students, usually runs as summer programs. Usually involves coding for satellites, etc.

<https://zerorobotics.mit.edu/>

InvenTeams

Teams of high school students engineer a product to solve a real-world problem. Each team gets a grant.

<https://lemelson.mit.edu/inventeams>

Regeneron Science Talent Search

Science & mathematics competition for high school seniors.

<https://www.societyforscience.org/regeneron-sts/>

Modeling the Future Challenge

Juniors & seniors in high school conduct their own research, using & modeling with real data, etc.

<https://www.mtfchallenge.org/faq/>

MathWorks Math Modeling Challenge (M3 Challenge)

High school juniors & seniors use math modeling to tackle real world challenges.

<https://m3challenge.siam.org/>

Imagine Cup

Students ages 16+ create solutions using Microsoft Azure.

<https://imaginecup.microsoft.com/en-us>